

Digitized by the Internet Archive  
in 2022 with funding from  
University of Toronto

<https://archive.org/details/31761114686595>



CA 1 Z 1

Government  
Publications

-63B45 cage  
-63B46  
-63B47

Canada. Royal Commission on  
bilingualism and biculturalism  
Documents

S-7

1967















731

A (30)

Canada

5-7

Documents  
of the Royal Commission  
on Bilingualism  
and Biculturalism

1967

# 5 Corporate Adaptability to Bilingualism and Biculturalism

A Study of  
Policies and Practices in  
Large Canadian Manufacturing Firms

Robert N. Morrison



*Presented to the*  
LIBRARY *of the*  
UNIVERSITY OF TORONTO

*by*

Mr. Royce Frith  
Commissioner

Royal Commission on  
Bilingualism and  
Biculturalism







Corporate Adaptability  
to Bilingualism  
and Biculturalism

Documents of the  
Royal Commission on  
Bilingualism and  
Biculturalism

---

- |   |                               |  |
|---|-------------------------------|--|
| 1 | Peter H. Russell              | <i>The Supreme Court of Canada as a Bilingual and Bicultural Institution</i> |
| 2 | Thérèse Nilski                | <i>Conference Interpretation in Canada</i>                                   |
| 3 | David Hoffman and Norman Ward | <i>Bilingualism and Biculturalism in the Canadian House of Commons</i>       |
| 4 | Donald V. Smiley              | <i>Constitutional Adaptation and Canadian Federalism Since 1945</i>          |
| 5 | Robert N. Morrison            | <i>Corporate Adaptability to Bilingualism and Biculturalism</i>              |

*To be published*

---

- |                 |  |
|-----------------|--|
| D. E. Armstrong | <i>Education and Economic Achievement</i>                                |
| Jacques Dofny   | <i>Les ingénieurs canadiens-français et canadiens-anglais à Montréal</i> |
| André Raynauld  | <i>La propriété des entreprises au Québec</i>                            |



Documents  
of the Royal Commission  
on Bilingualism  
and Biculturalism

---

Corporate  
Adaptability to  
**5** Bilingualism and  
Biculturalism

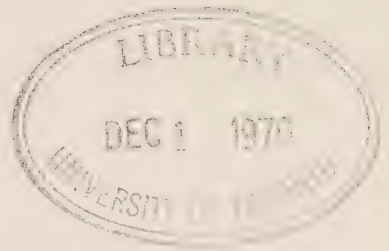
---

A Study of  
Policies and Practices in  
Large Canadian Manufacturing Firms

Robert N. Morrison

---

*This document has been prepared for the Royal Commission on Bilingualism and Biculturalism. Although published under the auspices of the Commission, it does not necessarily express the Commission's views.*



Crown Copyrights reserved

Available by mail from the  
Queen's Printer, Ottawa,  
and at the following  
Canadian Government bookshops:

*Halifax*  
1735 Barrington Street

*Montreal*  
Aeterna-Vie Building, 1182 St. Catherine Street West

*Ottawa*  
Daly Building, Corner Mackenzie and Rideau

*Toronto*  
221 Yonge Street

*Winnipeg*  
Mall Center Building, 499 Portage Avenue

*Vancouver*  
657 Granville Street

or through your bookseller

Price \$4.00 (subject to change without notice)

Catalogue No. Z1-1963/1-2/5

Queen's Printer for Canada  
Ottawa, 1970

List of Tables xii

List of Figures xvi

Preface xix

Chapter I	Introduction	1
	A The Problem	1
	B Business in a Bilingual-Bicultural Society	2
	C The Need for Factual Information	2
	D Some Distinctions in Our Approach	4
	E The General Effect of Bilingualism and Biculturalism on Costs and Profit	6
	F General Criteria for Evaluating Business Practices	9

Chapter II	Organization of the Study	11
	A Scope of the Project	11
	B Objectives	12
	C The Selection of Explanatory Factors	12
	Language and ethnicity	13
	Ownership	13
	Location of head office	14
	Ownership-location	14
	Type of product	14
	Scope of operations	16
	Location of company operations	16
	Operating functions	17
	D Factors not Considered	17
	E Sample Selection	18
	Criteria	18
	Procedure	19
	Response	20
	Evaluation	22

Chapter III	General Characteristics of Sample Firms	25
	A Patterns of Employment	26
	All firms	26



	National and regional firms	31
B	Patterns of Sales	34
C	Management's Perception of the Bilingual- Bicultural Problem	37
	FCQ firms	37
	ECQ firms	39
	ECC firms	41
	ForFrQ firms	42
	UKQ firms	43
	USQ firms	45
	USC firms	46
Chapter IV	Factors Determining the Language of Business	49
A	Ownership	51
B	Management	51
C	Suppliers	53
D	Labour Force	54
E	Sources of Technology	55
F	Markets	56
G	Government and Social Institutions	57
H	Summary	57
Chapter V	Executive Officers and Directors	59
A	The Role of Management	59
B	Executive Officers	60
C	Directors	65
	Directorships	65
	Directors	67
Chapter VI	Current Conditions: Salaried Employees	71
A	Introduction	71
B	The 36-Firm Sample	72
C	The Standard Chart	73
D	Analysis of the Total Sample	73
	Distribution of employees by income and mother tongue	75
	Bilingual requirements on French- and English- speaking employees	75

	The language of business in each work area	76
	Interpretation	77
E	Differences Due to Ownership-Location Group	78
	FCQ firms	78
	ECQ firms	79
	ECC firms	79
	ForFrQ firms	82
	UKQ firms	82
	USQ firms	83
	USC firms	84
F	Differences Due to Scope of Operations	84
	National and regional firms	85
	ECQ firms	88
	UKQ firms	88
	USQ firms	89
G	Differences Due to Location of Operations	89
	Montreal region	89
	Quebec excluding Montreal	92
	Ontario, Atlantic provinces, and Western provinces	93
H	Differences Due to Functional Area	96
	Manufacturing	96
	Marketing, including sales and advertising	97
	Employee relations	99
	Engineering and research and development	100
	Finance and accounting	102
	Public relations	103
	Purchasing	103
Chapter VII	Changes in Current Conditions	107
Part 1	Some Background Factors	107
A	Availability	107
B	Retention	108
C	Mobility	109
Part 2	Recent Hiring Practices	111
A	The 35-Firm Sample	111
B	The Standard Chart	111
C	Analysis of the Total Sample	113
D	Differences Due to Ownership-Location Group	116
	FCQ firms	116
	ECQ firms	117

	ECC firms	117
	ForFrQ firms	117
	UKQ firms	120
	USQ firms	120
	USC firms	121
E	Differences Due to Location of Operations	121
	Montreal region	121
	Quebec excluding the Montreal region	124
	Ontario, Atlantic provinces and Western provinces	125
F	Differences Due to Functional Area	125
	Manufacturing	125
	Marketing	127
	Engineering and research and development	128
	Finance and accounting	128
Part 3	Relocation of Employees	129
A	The 34-Firm Sample	131
B	The Standard Chart	131
C	Analysis of the Total Sample	131
D	Differences Due to Ownership-Location Group	134
	FCQ and ForFrQ firms	134
	ECQ firms	137
	ECC firms	137
	UKQ firms	140
	USQ firms	140
	USC firms	140
E	Differences Due to Functional Area	144
	Manufacturing	144
	Marketing	144
	Engineering and research and development	148
F	Mobility within Bilingual-Bicultural Regions	151
G	Effect of Age, Marital Status and Family Size	152
Chapter VIII	Hiring Practices Regarding Recent University Graduates	155
A	Introduction and Summary	155
B	Graduates in Engineering	156
C	Graduates in Commerce	158



Chapter IX	Training and Further Education of Employees	163
A	The Importance of Continuing Education	163
B	Direct Costs Incurred	164
C	Employees' Time Devoted to Training and Continuing Education	167
D	Success of French-Language Courses	170
Chapter X	Employee Evaluation	175
A	The Use of Systematic Techniques	175
B	Some Effects of Systematization	176
C	Job Analysis	178
D	Performance Appraisal	180
E	Language Used	183
F	Perceptions and Attitudes of Senior Management	186
G	The Position of English-Speaking Employees	188
Chapter XI	Communication within the Firm	191
A	Introduction	191
B	Forms of Communication Used to Facilitate Operations	192
	Interoffice memoranda	192
	Shop drawings	194
	Instruction manuals	194
	Training manuals	197
C	Forms of Communication that Affect the Employee Personally	197
	Employment application forms	197
	Booklets describing employee benefits	199
	Certificates of employee benefits	199
	Employee identification cards and badges	203
	Union contracts	203
D	Forms of General Communication with All Employees	203
	Notices to employees	203
	Safety posters	206
	Direction and other signs	206
	The employee newspaper	206

Chapter XII	Purchasing and Marketing	213
Part 1	Purchasing	213
	A Introduction	213
	B Purchasing Personnel: Importance of the Ability to Speak French	214
	C Purchasing Personnel: Importance of the Ability to Speak English	216
	D The Language Used in Written Forms	216
Part 2	Marketing	217
	A Introduction	217
	B The Pattern of Sales	218
	C Advertising	225
	D The Language Ability of Sales Personnel	230
	Differences due to ownership-location group	231
	Differences due to type of product	235
Chapter XIII	Shareholder Relations	239
	A Annual Reports	239
	B The Annual Shareholders' Meeting	241
	C Share Certificates	241
Chapter XIV	The Use of French in Business	245
	A Regions and Functions Where French Can Be the Working Language	245
	B The Opportunity to Do Effective Work	247
Chapter XV	Summary and Conclusions	251
	A Summary	252
	B Conclusions	258

Appendix	Questionnaire (English): Corporate Policies and Practices with respect to Bilingualism and Biculturalism 261
	Questionnaire (French): Politiques et pratiques du monde des affaires relativement au bilinguisme et au biculturalisme 323
Notes to Chapters	385

## List of Tables

## Tables in Chapter II

- II.1      Ownership-location categories and code designation    15  
II.2      Summary of response to project    21  
II.3      Employment in sample firms compared with total employment in  
          manufacturing    23

## Tables in Chapter III

- III.1     Total employment by ownership-location group    26  
III.2     Total employment by ownership-location group and by  
          region    28  
III.3     Average number of employees per firm by ownership-location  
          group    31  
III.4     Total employment by region for regional and national  
          firms    32  
III.5     Distribution of sales by type of purchaser (percentages)    35  
III.6     Percentage distribution of sales by region (41 firms)    36

## Tables in Chapter V

- V.1      Distribution of executive officers by mother tongue    61  
V.2      Length of tenure of executive officers    63  
V.3      Distribution of directorships    66  
V.4      Distribution of directors and multiple directorships    68

## Tables in Chapter VI

- VI.1     Employees earning \$5,000 per annum and over: Employment in  
          sample firms compared with total employment in manufac-  
          turing    73  
VI.2     French-speaking engineers as a percentage of total    102

## Tables in Chapter VII

- VII.1    Inter-regional mobility; Ownership-location group: All,  
          Function: All    135



VII.2	Inter-regional mobility; Ownership-location group: FCQ; Function: All	136
VII.3	Inter-regional mobility; Ownership-location group: ForFrQ; Function: All	138
VII.4	Inter-regional mobility; Ownership-location group: ECQ; Function: All	139
VII.5	Inter-regional mobility; Ownership-location group: ECC; Function: All	141
VII.6	Inter-regional mobility; Ownership-location group: UKQ; Function: All	142
VII.7	Inter-regional mobility; Ownership-location group: USQ; Function: All	143
VII.8	Inter-regional mobility; Ownership-location group: USC; Function: All	146
VII.9	Inter-regional mobility; Ownership-location group: All; Function: Manufacturing	147
VII.10	Inter-regional mobility; Ownership-location group: All; Function: Marketing	149
VII.11	Inter-regional mobility; Ownership-location group: All; Function: Engineering and research and development	150
VII.12	Employee mobility in regional and national firms	152
VII.13	Distribution of relocated employees by age, marital status and family size	153

#### Tables in Chapter VIII

VIII.1	Hiring practices: Graduates in engineering	157
VIII.2	Hiring practices: Graduates in commerce	159

#### Tables in Chapter IX

IX.1	Training and further education of employees: Direct costs incurred	165
IX.2	Training and further education of employees: Direct costs incurred	167
IX.3	Training and further education of employees: Courses given within the firm	168
IX.4	Training and further education of employees: Courses given outside the firm	171

## Tables in Chapter X

- X.1 Personnel and employee relations: Number of employees considered for a vacant position 177
- X.2 Personnel and employee relations: Degree to which job analysis system is used 179
- X.3 Personnel and employee relations: Degree to which performance appraisal system is used 181
- X.4 Personnel and employee relations: Degree to which appraisal interview is used 182
- X.5 Personnel and employee relations: Policy regarding language used in appraisal interview 184
- X.6 Personnel and employee relations: Language used in written records of job description 185

## Tables in Chapter XI

- XI.1 Intrafirm communication: Interoffice memoranda 193
- XI.2 Intrafirm communication: Shop drawings 195
- XI.3 Intrafirm communication: Instruction manuals 196
- XI.4 Intrafirm communication: Training manuals 198
- XI.5 Intrafirm communication: Employment application forms 200
- XI.6 Intrafirm communication: Booklets describing employee benefits 201
- XI.7 Intrafirm communication: Certificates of employee benefits 202
- XI.8 Intrafirm communication: Employee identification cards and badges 204
- XI.9 Intrafirm communication: Union contracts 205
- XI.10 Intrafirm communication: Notices to employees 207
- XI.11 Intrafirm communication: Safety posters 208
- XI.12 Intrafirm communication: Direction and other signs 210
- XI.13 Intrafirm communication: Employee newspaper 211

## Tables in Chapter XII

- XII.1 Purchasing: Importance of ability to speak French in dealing with suppliers 215

XII.2	Purchasing: Importance of ability to speak English in dealing with suppliers	215
XII.3	Purchasing: Language used in written communication with suppliers	218
XII.4	Marketing: Percentage breakdown of sales by type of purchaser	219
XII.5	Marketing: Percentage breakdown of sales by region	220
XII.6	Relative importance of sales to French Canadian buyers	223
XII.7	Relative significance of sales in the Montreal region	224
XII.8	Marketing: Language of conception of advertising	229
XII.9	Marketing: Language ability of sales personnel (all ownership-location groups)	231
XII.10	Marketing: Language ability of sales personnel (FCQ)	232
XII.11	Marketing: Language ability of sales personnel (ECQ)	232
XII.12	Marketing: Language ability of sales personnel (ECC)	233
XII.13	Marketing: Language ability of sales personnel (ForFrQ)	233
XII.14	Marketing: Language ability of sales personnel (UKQ)	234
XII.15	Marketing: Language ability of sales personnel (USQ)	234
XII.16	Marketing: Language ability of sales personnel (USC)	235
XII.17	Marketing: Language ability of sales personnel (20 industrial goods manufacturers)	236
XII.18	Marketing: Language ability of sales personnel (15 consumer goods manufacturers)	236
XII.19	Marketing: Language ability of sales personnel (six manufacturers of both industrial and consumer goods: "mixed")	237

#### Tables in Chapter XIII

XIII.1	Shareholder relations: Language used in the annual report	240
XIII.2	Shareholder relations: Language used in conducting the annual shareholders' meeting	242
XIII.3	Shareholder relations: Language used in printing share certificates	242

#### Tables in Chapter XV

XV.1	Adequacy of the explanatory factors used in this study	254
------	--	-----

## List of Figures

## Figures in Chapter IV

- IV.1 Lines of communication between the firm and its environment 50

## Figures in Chapter VI

- VI.1 Characteristics of salaried employees: Basic chart 74
- VI.2 Characteristics of salaried employees: Differences due to ownership-location 80
- VI.3 Characteristics of salaried employees: Differences due to scope of operations 86
- VI.4 Characteristics of salaried employees: Differences due to location of operations 90
- VI.5 Characteristics of salaried employees: Differences due to functional area 94
- VI.6 Characteristics of salaried employees: Differences due to product type 98

## Figures in Chapter VII

- VII.1 Recent hiring, French Canadians: Expected 112
- VII.2 Recent hiring, French Canadians: Actual 112
- VII.3 Recent hiring, salaried employees: Basic chart 114
- VII.4 Recent hiring, salaried employees: Differences due to ownership-location 118
- VII.5 Recent hiring, salaried employees: Differences due to location of operations 122
- VII.6 Recent hiring, salaried employees: Differences due to functional area 126
- VII.7 Relocation of salaried employees: Basic chart 130
- VII.8 Relocation of salaried employees: Differences due to ownership-location 132
- VII.9 Relocation of salaried employees: Differences due to functional area 145



Figures in Chapter XII

XII.1	Advertising in French-language consumer media	227
-------	---	-----



This study constituted part of a joint project undertaken on behalf of the Royal Commission on Bilingualism and Biculturalism by faculty members of l'École des hautes études commerciales (affiliated with the University of Montreal) and the Graduate School of Business of McGill University.

The people principally involved in the joint project were Professors Roger Charbonneau, Pierre Lefrançois and Guy Archambault of l'École des hautes études commerciales, and Professors Donald E. Armstrong and William Pugsley of McGill University, as well as the author. Deepest thanks are due to all these people, especially Professor Lefrançois, for their advice and assistance in organizing the study, and for their efforts in conducting the many interviews which formed an integral part of the process of collecting information.

Special thanks are also due to the presidents and executive officers of the sample companies, whose extensive efforts in preparing replies to our questionnaires, and whose generosity in giving us their time, their opinions, and the benefit of their experience during our interviews with them ensured the success of the central part of this study. Although these people must necessarily remain anonymous, I wish to dedicate this report to them.

I must also acknowledge the work of Professors Thorpe and Freibergs, of the staff of the McGill University Computing Centre. Their help in writing computer programmes greatly facilitated the analysis of some of the data received in the questionnaires. A succession of students at the McGill Graduate School of Business, notably Réal Dion, Robert Miller, Charles Heinrich and Alec Lorentin, performed excellently as research assistants. Finally, I must express my deepest gratitude to Mrs. Marilyn Belec, Miss Susan Bush and Mrs. Liliane Hozer who patiently and efficiently typed the successive reports, and whose excellent secretarial efforts enabled the project to be carried forward despite the fact that the faculty members involved could

devote to it only a part of their time away from teaching. In spite of all this assistance, however, errors and shortcomings will no doubt come to light, and these must remain the sole responsibility of the author.

The final report of the project, of which this is the revised version for publication, was delivered to the Royal Commission in the first half of 1966, and the information contained herein relates to conditions in 1964 and 1965. Although the basic characteristics of Canadian corporate policies and practices are unlikely to have changed greatly since that time and the findings are, I believe, still valid, it is suggested that this work should be regarded as a pilot study, and that successive further soundings should be made in order to determine the direction and persistence of current and future changes.

McGill University  
July, 1968

Robert N. Morrison

*A. The Problem*

The Canadian "problem" of bilingualism and biculturalism has been stated in many forms. For our purposes, we may put it as follows. A French culture (of which the French language is an essential element) is struggling to survive and assert itself in a North American environment, an environment which is dominantly non-French and not French-speaking. Canada must preserve this culture which is part of our birthright, in order to take fullest advantage of it—in the complete sense of national and personal development, and not solely as a "barrier" to the encroachment of American culture. It is one of our most important natural resources. As we seek to assert (or, in the case of many of us, rediscover) the French Canadian culture, we should not be surprised to find that difficulties arise in many respects. Nowhere are the difficulties more acute, the costs more evident, and the immediate rewards less apparent, than in business.

It is the purpose of this study to investigate the problem of bilingualism and biculturalism as it affects Canadian business. Although this is only one aspect of a matter which is wide enough in scope to pervade most elements of our national character, it nevertheless calls for fairly detailed examination of a great number of facets of business life. Accordingly, the coverage of our study must range from fairly broad matters of company policy to quite detailed elements of certain important, or sensitive, practices, and it must attempt to distinguish those things that a company may do in response to its bilingual-bicultural environment from those things that it would do in any case, in the normal course of business, regardless of where its plants are located, or what the language abilities of its employees and customers might be.

In this chapter, we shall look at some rather general considerations, and then go into more detail later.



### *B. Business in a Bilingual-Bicultural Society*

During recent years, when the growing problems of Canadian unity which brought about the creation of the Royal Commission on Bilingualism and Biculturalism were being brought into the open, most of the discussion has tended to centre around matters affecting the constitution, cultural identity, civil rights respecting language, and the balance of social and political influence. The primary emphasis has been on social and cultural relationships, stemming mainly from each individual Canadian's subjectively-defined sense of identity and awareness of opportunity.

It is not unnatural, however, that the business sector (and especially big business) should have demanded its share of comment and attention too. Business is, after all, one of the most important and one of the most easily recognizable elements in the social order. In its dual role as an employer of people and as a provider of goods and services for their consumption, business represents both a source of income and a drain on our money assets. For the employee and owner alike, business also provides an opportunity for creativity and development and, it is to be hoped, satisfaction. In a bilingual-bicultural context it is readily apparent that, although Canadians may choose to remain in their two solitudes in church, school and social relations, they often cannot avoid being forced together in the market place and in the workplace.

### *C. The Need for Factual Information*

As public discussion about the role of business has progressed, it has become increasingly apparent that much of the opinion being voiced has had little, if any, factual base to support it. Inevitably, the tendency has developed for generalizations to be based on anecdotal recollection, or wrong conclusions to be drawn from incomplete or irrelevant statistics.

The fact that it has not been considered relevant, until now, to collect and publish statistics relating to business, based on distinctions of ethnicity and mother tongue, constitutes a major impediment to serious discussion on the subject. At the same time, this fact also represents an important characteristic of the current state. If we have not considered it worthwhile to spend the money to gather data on this matter, does this mean we do not think the matter is sufficiently important? Or do we consider it so important, and so sensitive, that we have not dared to bring it into the open for examination? Or, again, do we accept its importance but recognize its place also, and feel that it is being handled well enough now, and that to bring this delicately-balanced arrangement out into the open would only overemphasize some aspects of it and do more harm than good?

Whatever may be the reason, we must now recognize that we are at the point where the bilingual-bicultural aspects of business life have been called into question forcibly enough to have left us no recourse but to open the matter for examination. Our task now is to look at it as objectively and as completely as we can.

Questions such as the following, selected from the domains of public and private discussion, show that the breadth of concern in this area is quite great.

Is it true that all the top jobs in Canadian industry are reserved for English-speaking Canadians? Is there insufficient opportunity for French Canadians in business, or, conversely, are they being promoted too rapidly into senior positions, to the detriment of their English-speaking colleagues? Are the large companies pursuing a policy of replacing their English-speaking middle management and staff employees in Quebec with French Canadians, and relocating the former to jobs in other parts of Canada? If such a policy does exist, how successful is its implementation? What about company directors? Most of the larger corporations have at least one French Canadian businessman on their boards, but is this only "window dressing" in that the same man or a small group of men reappear many times on the directorship lists?

What is the reaction of private industry to the efforts being made by the government of Quebec to foster the use of French in business? What opportunities are being given to the increasing number of young French Canadians who are graduating from university with degrees in engineering, commerce and other business-oriented disciplines? Do Canadian companies hire French Canadian graduates as readily as they do their English-speaking counterparts with equivalent educational backgrounds, and do they provide them with the same opportunity for advancement once they are hired?

These are the kinds of questions we shall seek to deal with in this study. They range from matters affecting personal well-being to the control of enterprise, and from there to the role of business in stimulating or reinforcing "cultural" changes. One thing is common to all of them, however, and that is that each carries an undertone of value judgment. In providing the objective facts we can, in this study, go only part of the way to answering them. The evaluation of the facts must remain subjective.

It is not our purpose to look into individual cases even though, to the people who are involved, the facts of the matter are much more meaningful than are the broader issues. What we shall attempt to do is establish the factual base against which individual cases may be evaluated. The wider importance of the work should lie, however, in the use it may have in the determination of both government and corporate policy. Such policy would be directed towards enabling and encouraging current worthwhile social change in Canada, while at the same time making optimal use of human resources in industry, ensuring

the continuing profitability and health of Canadian companies, and minimizing unhappy consequences on the personal level.

Our work thus represents the first step in the decision-making process: getting the facts of the matter. Evaluation of the current situation, the development of revised objectives, and planning for change come later. These later steps cannot (or should not) be undertaken until the factual base is obtained and understood. Such a procedure appeals to neither the radical nor the conservative (a point of which we were reminded several times during the data-gathering period of our study) but its necessity is undeniable.

#### *D. Some Distinctions in Our Approach*

Although much of the public discussion referred to earlier has involved the effect of business policies and practices on society, we should stress that this is not the province of the present study. As hinted in our partial list of typical questions, given above, we shall be primarily concerned with business itself, and with the policies and practices of business firms\* in a bilingual-bicultural context. To the extent that these policies and practices represent the response of business firms to their environment, our focus will be on the impact of society on business, not business on society. However, a better understanding of what these policies and practices are, and how they are determined, may provide some additional insight when we come to look at the matter of bilingualism and biculturalism on the broad place of Canadian society as a whole.

It may be worthwhile to draw another distinction. Our emphasis in this study is on the corporation as an organizational unit or system, and not on individual employees working within, and responding to, the system. The distinction is, of course, difficult to draw and even more difficult to maintain. Corporate management must necessarily define its policies and pursue its practices in response to many influences, and not the least of these are the aspirations and characteristics, cultural and otherwise, of its management and staff. Each manager is, after all, part of the labour force and part of the citizenry. Whatever mother tongue, ethnicity or cultural background he happens to have is bound to affect his performance and his decision-making.

Further, our examination of corporate policies will not be restricted to a survey of the formally-expressed lists of objectives and desiderata which many companies have set down in written form in the first section of their organization manuals, annual reports, or

---

\* Throughout this study, we use the terms "business firm," "firm," "company" and "corporation" interchangeably. They all refer here to a single corporate unit, which usually (though not necessarily) comprises more than one establishment.



booklets prepared for purposes of public and employee relations. These objectives are important, but their real significance necessarily lies in the interpretation given to them by senior management. For example, one firm may have a stated policy of promoting its most qualified people to positions of greater responsibility, while another may have a stated policy of encouraging the greatest possible rate of promotion of French Canadians, "other things being equal." The likelihood of advancement of qualified French Canadian employees may be just about the same in both companies, or it may even be the reverse of what is suggested by the two formally-stated policies. For reasons such as this, our examination of corporate policies goes beyond the formal statements, and concentrates rather more attention on the attitudes of people in senior management and their perception of the problem of bilingualism and biculturalism as it affects their company individually.

In looking at corporate *practices* we shall be taking measure of the way in which business firms actually conduct their affairs. The main point here is that our survey of corporate practices is a sort of census which has been taken for the first time. In our analysis, we can examine *differences* such as those due to geographic location, type of ownership, or type of product manufactured, but we cannot, of course, examine *trends*. All we shall have is a "snapshot" or cross-sectional view of Canadian industry taken during one period of time (1964-65).

In order to examine trends, we would have to have information relating to a number of time periods in the past, and this is not available simply because statistics based on language or ethnicity have not been collected from Canadian industry before now. Very few companies, in fact, have collected such data even for their own private records.

This study suffers from the greater disadvantage that really very little work of a descriptive nature concerning Canadian business has been undertaken so far. Unlike the United States, where a fairly large number of studies have been carried out by organizations such as the National Industrial Conference Board and the American Management Association, as well as the universities, Canada has benefited from very few attempts to gather information on how business operates. The few studies which have been done relate, like this one, to special problems (such as American ownership and control). To a certain extent, therefore, the present study is somewhat bulkier than it might otherwise have been, owing to the need to establish the general base, before looking at differences due to language, region and culture.

*E. The General Effect of Bilingualism and Biculturalism on Costs and Profit*

Before becoming too involved with the details of our study and its findings, it may be useful to look at the context in which Canadian business must approach the problems of bilingualism and biculturalism. This may help to explain the reaction of senior management to suggestions that special arrangements should be made by Canadian business to suit special Canadian conditions.

For purposes of discussion, we may state the suggestions as follows. Why do you not make your operations in French Canada (Quebec province and adjoining predominantly French-speaking regions) as truly "French" as possible, by using the French language in all communication and employing as many French Canadians as possible? Why not at least make your operations completely bilingual?

We must first recognize that Canadian business, and especially big business, is becoming more and more international in scope. Many companies already operate on the North American, not the Canadian, level. Two main consequences arise from this development. The first is that Canadian business firms must establish and maintain communication with other industries and other agencies throughout the continent and in many other parts of the world, not only in the immediate locality in which their own operations are based. This applies not only to markets and to sources of material, but also to sources of technological and competitive information. The second consequence is that Canadian business firms, as they encounter increasing competition, must continue to strive for the greatest efficiency possible in their own operations.

Both of these conditions severely restrict the flexibility of Canadian business managers in altering the structure of their organizations and their modes of operation in response to changing social patterns. Businessmen operating in the bilingual-bicultural regions of Canada are aware that they must meet additional requirements and often must incur additional costs, which are not shared by their competitors elsewhere. It is reasonable to presume that they will accept these additional costs only so long as other advantages, such as lower material, power or labour costs, are sufficient to compensate.

This point of view, which is essentially based on regional cost comparisons, goes only part of the way towards explaining the reluctance of Canadian businessmen to make rapid changes in their organizations and modes of operation in response to social and political pressure. It is not the whole story. If it were, then local subsidies based on regional cost comparisons could restore a balance. In any event, regional cost analysis is really most applicable to non-repetitive problems, such as a decision to build a new plant in a given region, or enter a new market area. But once a plant has been built or an operation has been established, the need to recover sunk



costs alters the basis of comparison and, of course, severely restricts the flexibility of the businessmen in moving operations elsewhere.

There are other, equally important considerations as well, not least of which is the effect of change on present employees who have been accustomed to work according to language patterns currently in effect all over North America. To change either the people or their language of work would require a great deal of time and effort. The effect of the change on efficiency, costs and morale would be difficult to estimate.

In looking at these matters, however, we are again concentrating only on part of the problem. Similarly, if we were to examine the possibly beneficial effects of adapting to social changes, such as growing markets or wider access to potential employees, we would again be concentrating only on some elements, which, although important in themselves, do not express the whole problem. Most of these partial analyses will in fact be carried out in later sections of this report. For the present, however, we must seek a wider context—a rationale into which all these elements may fit.

The rationale is best understood if we look at business from a "systems" point of view. Such an approach pays specific attention, not only to all the elements or parts of a business firm, but also to the communications linkages which bind them together.<sup>1</sup> In the current context, the important thing to note about any business system is that it is more than an assemblage of people, materials and machines. It is also organized in a specific manner, for purposes of accomplishing an objective according to a plan. Because the elements are integrated, the whole is now dominant and the parts become subordinate to it. By the same token, the value of the whole is greater than the sum of the values of the parts because the productive capacity of the whole is greater than the productive capacity of all parts operating independently. The importance of language can be seen clearly, since integration of the system is accomplished and maintained through a communications network comprising, usually, both people and machines. The importance of other cultural factors besides language can also arise in the operation of the communications network, as will be seen later.

The systems approach to business suggests a new approach to the theory of profit. This subject has, in varying ways and with varying interest, held the attention of economists, legislators, social reformers, commentators on the social order, trade union officials and government authorities, in addition to businessmen, for many years. The fascination arises primarily because the efficiency factor of a successful business enterprise is greater than one; that is, the value of its output is greater than the total value of all the inputs used in producing that output. The difference is, of course, net profit.<sup>2</sup>

To the classical economist, net profit represents the payment to the entrepreneur—the person or agency who organizes all the factors of production (men, money, machines and land, as well as technology or "know-how") into a producing entity.<sup>3</sup> In the more modern systems terminology, which is closer to present-day conditions where the "organizer" is difficult to identify, profit (or "net income of the enterprise") is a measure of the value of the system as a going concern.

The system—the integrated whole—is able to realize a profit partly because of the managerial effort that has been devoted to it, and partly because its managers have been willing to undertake risks and to innovate. But a major part of the profit, or value of the system as a going concern, stems from the operation of the communications network that links all the elements and ensures that they work together efficiently in the manner intended. This is the vital part. It is the effective operation of this communications network which enables the business to realize a profit.

It is important to bear in mind that the communications network is largely designed and operated by managers and staff employees in an enterprise. The ability of the system to make a profit is thus directly dependent on the ability of people in the system to communicate quickly, accurately and effectively. There are various modes of communicating, only some of which are based on language as such. In the simplest of these, words and mathematical symbols are used to transmit statistical data, operating instructions and direct orders. But such communication is restricted in scope and importance. Where discussion leading to decision-making and policy formulation is involved, there are other problems besides language. At this level, effective communication depends as much on the ability of the receptor to interpret the message in the "right" way as on the wording of the message itself. This is a "cultural" matter, since the way in which a person interprets a message depends on his education, experience and general background, as much as on his ability to understand the language used.

Until fairly recently, questions and suggestions coming from outside the business sector concerning the conduct of its affairs tended to revolve around the matter of profitability. Comment on bilingualism and biculturalism in business has rarely concerned profits (except for occasional questions about their distribution to persons of various language and ethnic groups). Instead, as noted earlier, two more indirect matters have been discussed: (1) the ethnicity, or cultural background, of the people who operate within the Canadian business system; and (2) the language used within the system, and between the system and its environment.

On first view, it looks as though these questions are more specific, more direct and to the point, and more subtle in their implications than the older, more general comments regarding profit. They are. But what is not quite so evident is that they concern exactly the two

issues which affect communication within a business system, and the communications network, as we have seen, has a direct bearing on profits. Little wonder that businessmen are just as wary as they ever were!

Changes in both the areas mentioned may or may not affect profits adversely. But the fact that changes will affect profits at all means that they will not be made easily or quickly in response to social pressure or governmental suggestion. The business system is not indifferent to these matters.

It is well recognized that nearly all business enterprises have a number of objectives besides profit-making. Some are subjectively defined by senior management or ownership, some are imposed by government legislation, and some represent a response to social pressures or ideology. We do not wish to minimize their effect in determining business policies and practices. Our reason for paying particular attention to the profit motive is that it is common to all enterprise, that success or failure in achieving this objective is measurable (and frequently measured), and that profits are, after all, essential to the survival of the enterprise.

#### *F. General Criteria for Evaluating Business Practices*

Use of the systems concept for analyzing and discussing business behaviour offers a final advantage, and that is a set of criteria for evaluating corporate practices.

As we noted earlier, our examination of corporate policies will be carried out in terms of senior management's perception of the bilingual-bicultural problem. Most of our examination of corporate practices will be devoted to discovering the facts of the matter, but possession of the facts is, by itself, not completely satisfying. We shall want to evaluate them. Each reader may have his own criteria, based, perhaps, on what he considers is "right," "best," or "fair" for Canadian society. This involves making value judgments which are necessarily personal and subjective. We hope that the data presented here will be of use in the formulation of such value judgments, and will help to clarify discussion of the problem.

For our general scheme of evaluation, we shall make use of the requirements for a well-operating business system: that each element be "tuned" to every other and to the whole, and that the whole be "in tune" with its environment. Since we live in a world that is continuously changing, keeping in tune requires adaptability, and this will be our chief criterion. Recent changes in the Canadian social structure with respect to language and culture are fairly well known. In our evaluation we shall determine how well Canadian business has adapted to these changes. In some instances, we can see where business has lagged; in others, we can see where it has anticipated and led social change.

An evaluation based on these criteria will also involve value judgments; we cannot remain completely objective. But these should be clearly apparent when they are encountered. We shall not forget, however, that our approach leaves aside the broader question of whether an element of society that is in tune with society as a whole is making its best contribution. We shall assume that it is, without further discussion, except to note that a society, or system, in which all elements are in tune is not necessarily stable. It may be changing very rapidly.



### *A. Scope of the Project*

Our first task is to delineate the scope of the project more precisely. Until now, we have been talking of "the business firm" generally, without regard to its size, location, or the type of activity in which it is engaged. There is, of course, an enormous variety. But if our study is to be of any use, it must be fairly detailed, and this involves an examination and analysis of many aspects of each firm's activities. The study cannot be "indirect," or based solely on published data relating to groups of firms or industries, partly because the data generally available are inadequate for our purposes, and partly because we must analyze the individual firm, not the industry or group of industries. Clearly, it becomes necessary to examine a number of firms individually and treat each firm or groups of similar firms as a unit. It follows, then, that the number of cases studied must be relatively small (say less than 50 companies) if the study is to be kept within manageable limits.

Although it is open to us to select for study a number of firms from the whole spectrum of Canadian business, it is apparent that, because of its relatively small size, our sample could include only a few firms from each of the major sectors (manufacturing, mining, agriculture, forestry, construction, finance, transportation, communications, and so on). Analysis would be difficult because differences between these sectors themselves may obscure differences in policies and practices among individual firms within each sector. Adequate analysis would require investigation of a very large number of firms, and exigencies such as shortages of time and money make this impossible. Accordingly, we shall deal with firms in only one sector—manufacturing. This sector is chosen because of its undoubted importance in the Canadian economy, because the activities of firms within it are fairly similar, and because it is the largest single employer of people—and the welfare and aspirations of people are at the root of the question of bilingualism and biculturalism.



In order to extract the greatest possible relevance from our anticipated findings, we shall add some further requirements:

- 1) Each sample firm should be large in relation to the group to which it belongs. This will ensure coverage of the greatest possible number of employees within a small sample.
- 2) All significant industrial groups within the manufacturing sector should be included. This is to ensure that we take into account as many facets of industrial practice as possible.
- 3) Sample firms should have large operations within the province of Quebec and adjacent bilingual-bicultural regions. As a target, employment in this area by each sample firm should number at least 500 people. This will focus attention on those firms which are most intimately concerned with bilingualism and biculturalism in the conduct of their business.

### *B. Objectives*

Having delineated the scope of our study, we can now restate our objectives in a more concrete manner:

- 1) To enquire into, document and analyze the policies and practices of large manufacturing firms operating in a bilingual-bicultural environment from the points of view of (a) the mother tongue of the people employed by such firms, and (b) the language of business used internally and externally in transactions or contacts.
- 2) To test for and attempt to discover which factors determine or "explain" these policies and practices.
- 3) To evaluate the adaptability of large manufacturing firms to regional differences in ethnicity and language.

Thus, our main goal is to provide an impartial review, discovery and statement of what is, at present, the case. To this we may add a minor goal, and that is to make some recommendations concerning the bilingual-bicultural aspects of corporate policies and practices, or to highlight certain practices that appear to be successful.

### *C. The Selection of Explanatory Factors*

The selection of explanatory factors necessarily reflects the hypotheses developed by the study group at the beginning of the project. Any hypothesis, to be meaningful, must include the possibility of some relationship between an event and the factors which explain or determine it. Mere statement of the hypothesis thus may appear to carry with it a degree of bias, and in view of the sensitivity of this study, this problem demanded much of our attention. In addition to the bias that is always possible in any application of the scientific method there was, we recognized, the possibility of a cultural or French-versus-English bias. However, the study group was itself composed of both French- and English-speaking Canadians, and this

fact undoubtedly helped to reduce any cultural bias which may have been present. The more normal kind of bias, which faces everyone who defines an area for investigation and designs tests for that purpose, could not be avoided here any more than it can in any "objective" testing procedure. We therefore make no excuse for any prejudgment which may seem to be apparent from reading between the lines. No prejudgment is intended. The following list includes those factors which, at this point, seem as though they *could* affect a firm's policies and practices. Our job throughout this report is to investigate whether each of them does seem to have a bearing on (or at least appear in conjunction with) certain policies and practices. Because of the obvious sensitivity of the subject, members of the study group exercised the greatest possible objectivity in testing for, and measuring, differences between individual firms or groups of firms.<sup>1</sup> It will be part of our job now to try to maintain this objectivity until all the facts can be considered and conclusions drawn.

The following explanatory factors were selected:

- 1) The language and nationality of ownership;
- 2) The location of the company's head office;
- 3) The type of product manufactured (whether consumer goods, or industrial materials, or both);
- 4) The geographic scope of the company's operations;
- 5) The region in which any given company operation is located;
- 6) The functions comprised by operations in any location.

### 1. *Language and ethnicity*

The questions of language and ethnicity require some further definition at this point in view of the fact that Canada's population includes people of many cultures, with many mother tongues. Taking our cue from the distinction most frequently made in discussions on the matter of Canadian bilingualism and biculturalism, we shall define as French-speaking all those people whose mother tongue, or language of greatest fluency, is French. All others will be defined as English-speaking. This distinction will apply both to the employees and to the owners of the firms being studied, remembering that, in the case of owners, they may be either individual citizens or (if the firm is a subsidiary) corporate citizens. Thus, French-speaking owners may be either private or corporate persons, and they may be Canadian, or they may be citizens of other countries, notably France, Belgium, and Switzerland. Similarly, English-speaking owners may be citizens of Canada, the United States or the United Kingdom.

### 2. *Ownership*

Ownership is defined, for our purposes, by possession of a controlling interest in the corporation. Generally, this is clearly evident from available information or the distribution of voting shares and from replies given to our questionnaire. In those few cases where it was not clear, a decision was made on the basis of mother tongue and

nationality of members of the boards of directors, or in consultation with chief executives of the firms themselves.

Language and nationality of ownership were selected for testing in order to determine whether a relationship does exist between these factors and the policies and practices of the firm. Questions such as the following give an example of what we wish to explain: Do firms owned by French-speaking persons have a tendency to employ more French-speaking people in senior managerial positions than do firms owned by English-speaking persons? Are they more inclined to use French as a language of business? Are they inclined to demand more bilingual ability on the part of their employees, or less? And does it make a difference whether French-speaking owners are Canadian or European, or whether English-speaking owners are Canadian, British, or American? Are firms owned by English-speaking Canadians, for example, more sensitive to the need for using French in certain circumstances than are firms owned by U.S. interests?

From the foregoing, it is clear that we do not think it is sufficient to distinguish only between French- and English-speaking owners. Their nationality, which in an indirect sense stands for their proximity to, or remoteness from, the problem, will also be taken into account.

### *3. Location of head office*

The second factor, the location of the company's head office, is also intended to serve as a measure of proximity to the area in which problems of bilingualism and biculturalism are most frequently encountered. In this case, however, the subject group is not ownership, but senior management. Interpretation of the term "head office," in fact, involves the application of this distinction. If a firm's head office, as defined in the strict legal sense, should not be located in the same city as the "executive office," then the latter was chosen for purposes of classification, since our emphasis is on the location of the senior, or central, decision-making group.

### *4. Ownership-location*

Because of the similarity between these two first explanatory factors, we have linked them to form a joint factor, called ownership-location. This will be the most important single "dimension" used in our analysis. The seven ownership-location categories which arise from this combination are shown in Table II.1 on the opposite page. The mnemonic code designation shown in the table will be used frequently in later sections of this report for more convenient reference.

### *5. Type of product*

The type of product manufactured by the firm has been selected as an explanatory factor partly because of its effect on the firm's pattern of organization, and partly because of its effect on the firm's pattern of contact with its environment, chiefly its market. Each of

Table II.1

Ownership-location categories and code designation

Code designation	Description*
FCQ	French Canadian owned, with head office in the province of Quebec.
ECQ	English Canadian owned, with head office in the province of Quebec.
ECC	English Canadian owned, with head office located elsewhere in Canada.
ForFrQ	Owned by citizens of foreign, French-speaking countries (such as France, Belgium or Switzerland) with head office in the province of Quebec.
UKQ	Owned by citizens of the United Kingdom, with head office in the province of Quebec.
USQ	Owned by citizens of the United States, with head office in the province of Quebec.
USC	Owned by citizens of the United States, with head office located elsewhere in Canada.

\*The term "citizen" as used above refers to corporate as well as private citizens. "Ownership" is based on majority of voting shares.

these may help to determine policies and practices. A manufacturer of consumer goods, for example, will tend to be very much aware of demographic, language and cultural factors in a region in which it sells its product, because it sells to the broad group of people living in that region. By contrast, a manufacturer of industrial material or equipment faces a group of buyers who are usually small in number, specialized and expert, and not necessarily representative of the language or culture of the region in which they are located. Contact with these people will usually involve the use of technical terminology which is common to the industry or the product, but not the culture of the region. Thus, we would imagine that market characteristics will have an important bearing on the language which is used in business.

The type of product also affects the patterns of organization, and this may give rise to differences in bilingual and bicultural policies and practices. For example, manufacturers of consumer products, particularly non-durable goods such as food and clothing, are likely to be market-oriented and locate their plants accordingly. Firms operating on a nation-wide scale tend to operate a number of plants, each of which serves its own region. Employment practices are thus likely to be regionally based, and may reflect demographic conditions in those parts of Canada in which plants are located. On the other



hand, manufacturers of industrial materials, particularly heavy equipment or resource-based products, tend to concentrate operations in a relatively small number of plants. In this case the firm, even though it may operate on a national or international scale, is more likely to pursue employment practices which are keyed to one or two regions only, and not to Canada generally.

#### *6. Scope of operations*

Measures of the geographic scope of a company's operations are intended to give direct confirmation of some of the factors outlined above, and to separate the effects of such factors from those which spring from the specific problems of marketing certain types of product. Our definition of the scope of a firm's operations is keyed to the location of manufacturing operations, not sales offices or other small branch operations. This means that differences due to varying scopes of operations, if they are found, will be more directly linked to the ethnic and linguistic characteristics of the firm's employees, and through these people to the characteristics of the various regions of Canada. Differences due to product type, as outlined above, will also be linked to the characteristics of various regions, but through the firm's marketing activities, as it seeks to maintain contact with the buyers of its products. In making this distinction, we hope to obtain some idea of how each determinant affects policies and practices.

For purposes of designating scope of operations, our sample will be divided into "regional" and "national" firms. Regional firms are those which have all their operations (except for branch sales offices) in the province of Quebec and adjacent bilingual-bicultural regions. National firms in the sample have substantial manufacturing operations in Quebec, but they operate in other regions of Canada as well. The distinction is thus independent of other factors, such as product type or ownership-location. One of the questions which may be answered by this distinction is whether a firm having the bulk of its employees in Quebec will have different policies and practices than another firm, similar in other respects, which must consider employees located in other parts of Canada as well. Further questions, treating only those employees of both types of firm who are located in Quebec, may be examined also, as we shall see.

#### *7. Location of company operations*

Variations in company policies and practices according to the region in which operations are located will also be examined. For these purposes, five regions in Canada have been designated: (1) the four Atlantic provinces, (2) Quebec province excluding Montreal, (3) metropolitan Montreal, (4) Ontario, and (5) the four Western provinces. The rationale behind this designation, which obviously treats Montreal and "other Quebec" in greater detail than other parts of Canada, naturally stems from the problems of bilingualism and biculturalism in Canada. Montreal is specifically separated from the rest



of Quebec both because of the greater concentration of English-speaking people in the Montreal area than elsewhere in the province, and also because most businessmen view Montreal as a centre of national, not provincial, significance. We thus have an eye both to demographic factors and to the perceptions of businessmen, which have an effect on policy formulation.

Within each region, measures will be made of employment and other practices for purposes of drawing comparisons and examining specific differences. The percentage distribution of sales to all regions will also be analyzed, and the results compared with the language requirements imposed on salesmen working in each region. A similar analysis will be carried out for purchasing personnel.

#### *8. Operating functions*

The last set of explanatory factors to be examined relates to the functions comprised by operations in any location or any ownership-location group. Seven functional areas are designated: (1) manufacturing; (2) marketing (including sales and advertising); (3) personnel and employee relations; (4) engineering, and research and development; (5) finance and accounting; (6) public relations; and (7) purchasing. A last area, designated as "other," will sometimes be used when treating conditions affecting the small number of people who cannot be assigned to any of the areas specified above.

The purpose of this breakdown is to examine whether the characteristics of people working in staff and supervisory positions, and the requirements which are made of them, are in any way related to the kind of work they do. We may put forward a rough hypothesis, for example, that the bilingual ability required of supervisory people in manufacturing or personnel is linked to the language characteristics of the company's wage-roll employees, while the bilingualism required of people working in sales or purchasing is linked to the language characteristics of buyers and suppliers, who are not part of the firm. Measures of these practices taken at a level comprising all functional areas could not give a complete reading of the adaptability of the company to the conditions facing it.

#### *D. Factors not Considered*

It may be helpful to bear in mind some of the groups and distinctions which are not considered in our evaluation. Chief among these are the following: firms not primarily engaged in manufacturing; firms operating entirely (except for branch sales offices) outside of Quebec; corporate form (whether a private or public company, or partnership, and so on); cultural and linguistic groups other than French and English (all others are included in the English-speaking group).

We might mention a fifth distinction which is not considered (except occasionally) and that is variation in the size of sample firms.

Strictly speaking, once a firm has met the criterion of "significant" size in Quebec and adjacent bilingual-bicultural regions, it acquires a "weight" equal to that of all other firms in the sample. Since our emphasis will be on relative differences between *groups* of firms, and our measurements will usually be in relative, not absolute, terms, we may feel we are on fairly safe ground in accepting this restriction. In some instances, the average number of employees per firm will be given for each group of firms, but this will be used only as a general guide, and here too the emphasis will be on relative differences. In a minor number of cases, employment size will be used to express results on a per capita basis. In general, however, we shall not consider differences in size as an explanatory variable in the sense of drawing a conclusion that, for example, the greater the number of employees the greater is the tendency towards a specific practice.

#### *E. Sample Selection*

Using the seven ownership-location categories described earlier, the joint study group made an initial selection of companies on the basis of our estimate of employment size, coupled with the requirement of good representation of all major industrial groups within the manufacturing sector. The selection criteria used necessarily reflect, as noted earlier, the hypotheses and methodology developed by the study group at the inception of the project. In particular, it was recognized at an early stage that random sampling techniques were not open to us. Practical limitations, stemming partly from a lack of information about the measurements we wished to make, and partly from the great effort we were about to ask sample companies to undertake, voluntarily, on our behalf, forbade the use of the usual sampling methods. Our decision to concentrate attention on relative differences between groups of companies reflects this. Accordingly, our efforts were directed towards ensuring that selected companies within each group represent an adequate range of employment size, practices (or "image") in a bilingual-bicultural context, type of product, and so forth. A few companies which are known to be large employers had to be left off the list in favour of smaller firms in order to ensure adequate representation in each ownership-location type or industrial group. The sample is therefore quite recognizably non-random, which means that the usual statistical techniques cannot be applied in analysis. It must be remembered, however, that those techniques have been developed in order to permit conclusions to be drawn about a large number of things or events, based on a small proportion of things or events drawn from the whole. In this case, our sample comprises a very large proportion of all firms which meet the criteria defining the whole.

##### *1. Criteria*

The selection criteria, which have been discussed earlier, are repeated here in summary:

- 1) Sample firms must be engaged primarily in manufacturing.
- 2) Each firm should be significant, if not dominant, in its industrial group.
- 3) The total sample should include representative firms of every major group of industries in the manufacturing sector.
- 4) Each firm must have operations of significant size in the province of Quebec. As a target (exact figures were not known ahead of time), employment in Quebec should be at least 500.
- 5) About one-third of all firms selected should have all their operations (exclusive of branch sales offices) in the province of Quebec and adjacent bilingual-bicultural regions. These firms are designated "regional."
- 6) There should be good representation (at least three firms) in each of the seven selected ownership-location categories.

The greatest possible use was made of published lists of the largest corporations in Canada, and statistics published by both government and private agencies relating to manufacturing companies, but in the last resort, selection was made on the basis of the collective personal knowledge and experience of members of the study group. We estimate that there were, in 1964, fewer than 90 manufacturing companies which met our criteria. Of these, 70 were selected for initial contact, of which 30 are regional and 40 are national in the scope of their operations. Companies not contacted belong to industrial groups which were, we felt, adequately represented in our sample.

## 2. Procedure

A letter was sent to the president or chief executive officer of each company explaining the purpose of our study and asking his support and assistance. Stress was laid on the amount of time and effort involved in participating in the study and the suggestion was made that, to facilitate coordination of effort within the company and with the study group, a senior executive be appointed to act as liaison officer. We proposed that the best procedure would be for each company to complete our questionnaire, and then, after it had been returned and studied, to arrange an interview between the president and two members of the study group (one from each business school). The purpose of the interview was, first of all, to ensure that an opportunity would be provided to discuss the context and implications of the quantitative data returned in the questionnaire, and secondly, to obtain from each company further information on its policies and other, more qualitative, aspects of its practices. At the same time, the opinions of top management regarding the question of bilingualism and biculturalism, which constitute the background against which the company's posture is determined, would be sounded out.

The questionnaire, in the Appendix, consists of five sections, corresponding roughly to five functional areas in the firm. The sections were bound separately with the idea that participating

companies might find it more convenient to distribute each section to the relevant departments for completion. To the extent that it was possible to anticipate the systems of record-keeping in all companies, and synthesize these into a common format, individual questions were laid out in a manner which made it as easy as possible to obtain and transfer information onto the questionnaire. Regrouping of most of the detailed data was done at the McGill University Computing Centre.

Extreme care was taken to ensure that all replies (indeed, all contacts with companies) were kept confidential. Despite the obvious difficulties involved in coordinating various projects, the research staff of the Royal Commission on Bilingualism and Biculturalism agreed to our request that we should not make available to them the names of any companies contacted. For all work done outside the two business schools, such as data processing at the McGill University Computing Centre, company code numbers were used. Within the business schools, access to files was restricted to faculty and staff members immediately involved in the project.

### *3. Response*

The response by companies to our request to participate in the project is summarized in Table II.2 below. Having in mind the very great amount of time and effort involved, the fact that the "success ratio" is greater than one-half (63 per cent) is good evidence of the concern felt by most businessmen about the question of bilingualism and biculturalism.

It is unsafe to draw from this table too many conclusions regarding differences in attitudes between the various ownership-location groups. To begin with, the numbers are too small. Also, some sample groups, such as FCQ (French Canadian ownership, head office in Quebec), comprise virtually all the large firms meeting the description. In other cases, such as USC (American-owned, head office located elsewhere in Canada), the number of firms requested to participate represent a smaller proportion of the total number of firms meeting the description. (This point is significant in other aspects of the question, but it is not at issue here.)

Of the 26 companies which did not accept our invitation to participate in the programme, 17 refused on receiving our first letter, and the remaining nine did so after having studied our questionnaire. The reasons given varied. Some of the most frequently cited were: the company's internal information system simply did not provide for the breakdown of employment by mother tongue, which we were stressing in our project; the company's organization was not suitable for the kind of study we had in mind; the company was currently undergoing reorganization and "everything was up in the air"; or (in only two cases, one French-speaking and one English-speaking) the company's management did not feel that the purposes of our project warranted the effort required. Some of the companies that could not, or would



Table II.2  
Summary of response to project

Ownership- location	Requested to participate	Accepted*	Refused or failed to return questionnaire
FCQ	9	7	2
ECQ	23	13	10
ECC	6	4	2
ForFrQ	6	4	2
UKQ	7	5	2
USQ	13	7	6
USC	6	4	2
Total	70	44	26

\*Although, as shown, a total of 44 firms accepted our request to participate, in the sense of returning our questionnaire and granting us an interview, not all were able to give us information on all subjects in sufficient detail to be included in all of our analyses. For example, our figures on employment (*see* Table II.3) are based on a sample of 41 firms, the three incomplete returns having been received from one firm in each of the FCQ, ForFrQ, and USC ownership-location groups. Throughout this report the number of firms covered by the analysis is shown in each section or table.

not, complete our questionnaire were willing to give us an interview. Three companies failed to acknowledge our first and successive letters. To the best of our knowledge, based on private information or informal contact with the people involved, the omission of these companies from our sample does not introduce a significant bias either one way or the other into our findings. This evaluation is, of course, quite subjective.

In addition to the 44 companies listed above, three other companies (one French Canadian-owned), not primarily engaged in manufacturing, participated in the project and gave us further information of a more general nature.

As we noted earlier, no attempt was made to include in our sample firms which do not operate in Quebec. Information on such cases would be helpful in evaluating differences between ownership-location groups such as those listed above, but two practical reasons prevented us from seeking to obtain it. One was the additional cost, in time and money, which would have been incurred, and the other was the probability that we would not have been successful in obtaining the help and support of a sufficient number of companies to collect sufficient data. A glance at our questionnaire will show that the amount of information requested—and its detail—is very great. In

many cases, the data had to be generated for the first time, since many firms had not been in the habit of making a distinction between employees by mother tongue. We estimate that to obtain the data we asked for, each firm had to devote between 10 and 40 man-days (depending on its size and the diversity of its operations) at a fairly senior staff level. In addition, our interviews took up between two and four hours of the time of the president and one or two of his senior officers. The firms responding to our project offered this high degree of cooperation and were willing to incur significant costs because they believed the question was important to their operations and to Canada. We feel it would have been unwise to ask for an equivalent effort from a firm which is not greatly involved with the problems of bilingualism and biculturalism, merely to provide us with a datum for comparison.<sup>2</sup>

#### *4. Evaluation*

Owing to the sampling problems discussed above, it is difficult to estimate how representative our findings are. As mentioned, the usual statistical techniques are not too suitable in this case. Representativeness may, of course, be based on many criteria, such as size of assets, level of sales, or size of employment. Because the question of bilingualism and biculturalism affects people, primarily, it would seem that employment would be the most suitable criterion, although in a few instances we have used level of sales to gauge the influence which a firm or group of firms may exert on its peers or the economy generally. Apart from census data (which relates to the whole population and not to employment in manufacturing), no information is available which would help in evaluating our sample data, for until the Royal Commission on Bilingualism and Biculturalism began its work, little attention was paid to the distinction between French- and English-speaking Canadians in the workplace. The corporations in the sample do, however, account for a large percentage of employment in manufacturing, particularly in Quebec, and even if, at very least, the sample is representative of nothing but itself, it is still a large and important part of the Canadian (and especially, the Quebec) economy. Table II.3 shows the extent of its importance. The data are based on replies from the 41 companies which were able to give us information on the number of people employed.

The bias towards Quebec firms is clearly evident from the percentage figures. Taking total employment in manufacturing in Quebec and Ontario only, we can calculate further that Quebec accounts for about 39 per cent of this, while Ontario accounts for the remaining 61 per cent. In the sample, the comparable ratios are very nearly the reverse: 63 per cent for Quebec and 37 per cent for Ontario. This is no disadvantage in terms of representativeness, since we are concentrating our attention, not on conditions in all Canada, but only in the bilingual-bicultural regions of the nation. These figures are, in fact, better viewed as a characteristic of the sample, rather than an evaluation of it.



Further evaluation will be carried out in the next chapter, which is devoted to a description of the sample as a whole and presents the statistical base, or datum, against which our further analyses will be made.

Table II.3

Employment in sample firms compared with total employment in manufacturing\*

Region	Total employment	Sample (41 firms)	Sample as per cent of total
Quebec	421,052	89,964	21.4
Ontario	668,959	52,885	7.9
Total Que. & Ont.	1,090,011	142,849	13.1
Canada	1,332,563	164,669	12.4

Source: Dominion Bureau of Statistics, Catalogue 72-204, *Earnings and Hours of Work in Manufacturing, 1964*.

\*We have taken figures for "total employment," not from the Annual Census of Manufactures, which reports on virtually all manufacturing establishments in Canada, but from the special survey listed above, which was conducted by the Labour Division of the Dominion Bureau of Statistics during the last week of October, 1964. This study covered approximately 11,000 establishments employing 15 or more persons, comprising some 90 per cent of total employment in all manufacturing establishments. Since this report gives a breakdown of employment by earnings and by region, which we found helpful in making comparisons with some of our own data (discussed later in the report), we have used figures taken from it to ensure consistency.



This chapter is devoted to a description of our sample. In evaluating the sample, we should keep in mind that it does not reflect the characteristics of all large manufacturing companies in Canada (although it does comprise a large proportion of such firms) but only those operating in bilingual-bicultural regions of the country.

The most direct and effective way of describing our sample would be to list participating companies by name. The list is, we believe, an impressive one, for the companies included in it represent most aspects of the Canadian manufacturing sector, generally defined. Admittedly, reference to the list would be helpful in identifying particular policies and practices described in later chapters, but it is not really necessary for our purposes. In any event, we are bound here by the need to keep the firm names confidential. What we shall do, therefore, is describe the general characteristics of the sample as a whole, and of groups of firms within it, from the viewpoints of employment, marketing practices and policy.

This will give us, on the one hand, a better understanding of the nature of this important part of the Canadian manufacturing sector and, on the other hand, it will provide the base, or norm, against which differences characterizing various sub-groups can be measured. Accordingly, the first section of this chapter will be devoted to statistical measures of the distribution of employment and sales by region and by mother tongue of the people involved, together with some discussion of our findings, while later sections will deal with management's perception of the problem of bilingualism and biculturalism. The first section thus characterizes business practice; the second concerns the foundation of business policies.

## A. Patterns of Employment

### 1. All firms

Table III.1 shows total employment, both wage-roll and salaried, reported by 41 sample firms. The figures are broken down by ownership-location group, and by percentage French-speaking.

Table III.1

Total employment by ownership-location group

Ownership- location group	Number of firms	Total employment		Employees whose mother tongue is French	
		Number	Percentage of total	Percentage of group	Percentage of total
FCQ	6	4,137	3	93	5
ECQ	13	61,460	37	58	50
ECC	4	15,212	9	20	4
ForFrQ	3	1,022	1	84	1
UKQ	5	18,400	11	49	13
USQ	7	33,611	20	43	20
USC	3	30,827	19	14	6
Total	41	164,669	100	43	100

As noted earlier (Table II.3), total employment by all sample firms accounts for 12.4 per cent of all manufacturing employment in establishments employing 15 or more persons in Canada. The comparable figure for the province of Quebec is 21.4 per cent, and for Quebec and Ontario combined, 13.1 per cent.

Table III.1 shows that 43 per cent of total employment in our sample is French-speaking. The percentage is much higher for firms where the language of ownership is French (FCQ = 93 per cent, ForFrQ = 84 per cent) but because of their small average size, firms in these two groups employ only 6 per cent of all French-speaking Canadians in the sample. ECQ firms alone account for 50 per cent of all French Canadian employment, while USQ firms account for 20 per cent and UKQ firms for 13 per cent. These three English-speaking ownership groups, with head office in Quebec, thus employ 83 per cent of all French Canadians in the sample.

Turning again to a consideration of the proportion of French Canadians in total employment of each ownership-location group, we note that the percentage is well above average for ECQ firms, at 58 per cent, and just equal to average for USQ firms, at 43 per cent. The figures are well below average for ECC firms, at 20 per cent, and USC firms, at 14 per cent.

While these figures do give us an idea of the significance of the French Canadian element in the total labour force of each group of firms, they are biased to the extent that the distribution of employment by geographic region is not the same for all groups of firms. For example, FCQ firms have nearly all their operations in Quebec, while USC firms have quite large plants in other parts of Canada, as well as in Quebec. A truer indication of French Canadian representation in the work force of each ownership-location group can be had by examining the regional breakdown (and in particular, figures for Montreal and other Quebec) for each group individually. This is given in Table III.2, which is a more detailed version of the previous table. In summary, Table III.2 shows that there is still a significant tendency for French Canadians to work for French-speaking firms, especially in Quebec outside of Montreal (99 per cent for FCQ, 97 per cent for ForFrQ), but that employment of French Canadians in this region by English Canadian firms is also very high (90 per cent for both ECQ and ECC). The lowest proportion is 70 per cent (USQ). As we shall see later, in the section devoted to a closer look at salaried employees, this variation is partly because of the kind of product being manufactured, and the technological and educational requirements imposed by the process.

It is interesting to note, incidentally, that very nearly all French Canadians employed in the Western provinces (96 per cent) work for English Canadian (ECQ and ECC) firms. Similarly, 96 per cent of French Canadians employed in Ontario work for ECQ, ECC and USQ firms. In both regions, the percentage for FCQ and ForFrQ firms is zero. For the Atlantic provinces, only 1 per cent of French Canadians coming into the sample work for FCQ firms. ECQ and USQ firms together account for 93 per cent. Both FCQ and ForFrQ firms have operations which employ people in the three regions outside of Quebec, although unlike other ownership groups, they do not have manufacturing plants in the regions. Their employees are therefore likely to be salesmen. The other groups, however, do employ some French Canadians in sales and other functions outside of Quebec, as well as in manufacturing. The conclusion seems to be that French-language firms tend to keep nearly all their French Canadian employees in Quebec while other groups of firms (though they follow the same overall trend) employ French Canadians outside of the province to a greater extent. There is an indication here of different practices respecting employee mobility, which we shall pursue further in a later section dealing specifically with this matter as it affects salaried employees earning \$5,000 or more per annum.

Turning now to more general comments regarding the size of firms and their contribution to total employment in the sample, we see first of all that the two French-speaking groups (FCQ and ForFrQ) account for only 4 per cent of the total. English-speaking Canadian firms (ECQ and ECC) account for 46 per cent, while American-owned firms (USQ and USC) account for 39 per cent. UKQ firms employ the



Table III.2  
Total employment by ownership-location group and by region

Region of employment	Total number of employees	Total Regional employment		Employees whose mother tongue is French	
		Percentage of group total	Percentage of grand total	Percentage of regional total this group	Percentage of regional total all groups
FCQ: 6 firms in group					
Montreal	1,272	31	1	92	5
Other Quebec	2,720	66	2	99	6
Atlantic provinces	25	1	-	22	1
Ontario	58	1	-	2	-
Western provinces	62	1	-	-	-
Total all regions	4,137	100	3	93	5
ECQ: 13 firms in group					
Montreal	11,976	19	7	61	33
Other Quebec	29,538	48	18	90	58
Atlantic provinces	2,042	3	1	26	59
Ontario	12,181	20	7	8	37
Western provinces	5,723	9	3	2	49
Total all regions	61,460	100	37	58	50

Table III.2 (cont'd)

Table III.2 (cont'd)					
Region of employment	Total		Employees whose mother tongue is French		
	Regional employment				
	Total number of employees	Percentage of group total	Percentage of grand total	Percentage of regional total this group	Percentage of regional total all groups
ECC: 4 firms in group					
Montreal	1,898	12	1	71	6
Other Quebec	1,393	9	1	90	3
Atlantic provinces	702	5	-	4	3
Ontario	8,209	54	5	5	15
Western provinces	3,010	20	2	3	47
Total all regions	15,212	100	9	20	4
ForFrQ: 3 firms in group					
Montreal	441	43	-	79	2
Other Quebec	522	51	-	97	1
Atlantic provinces	5	-	-	-	-
Ontario	41	4	-	5	-
Western provinces	13	1	-	-	-
Total all regions	1,022	100	1	84	1
UKQ: 5 firms in group					
Montreal	5,183	28	3	61	15
Other Quebec	7,162	39	4	79	12
Atlantic provinces	227	1	-	11	3
Ontario	4,840	26	3	2	3
Western provinces	988	5	1	-	1
Total all regions	18,400	100	11	49	13

Table III.2 (cont'd)

Region of employment	Total Regional employment		Employees whose mother tongue is French		
	Total number of employees	Percentage of group total	Percentage of grand total	Percentage of regional total this group	Percentage of regional total all groups
USQ: 7 firms in group					
Montreal	10,374	31	6	48	23
Other Quebec	11,332	34	7	70	17
Atlantic provinces	2,055	6	1	15	34
Ontario	9,094	27	6	12	44
Western provinces	756	2	-	1	4
Total all regions	33,611	100	20	43	20
USC: 3 firms in group					
Montreal	5,116	17	3	68	16
Other Quebec	1,037	3	1	88	2
Atlantic provinces	1,650	5	1	-	-
Ontario	18,462	60	11	-	1
Western provinces	4,562	15	3	-	-
Total all regions	30,827	100	19	14	6
Total: All ownership-location groups (41 firms)					
Montreal	36,260	22	22	60	100
Other Quebec	53,704	33	33	85	100
Atlantic provinces	6,706	4	4	13	100
Ontario	52,885	32	32	5	100
Western provinces	15,114	9	9	1	100
Total all regions	164,669	100	100	43	100

remaining 11 per cent. Firms owned by Canadians (FCQ, ECQ and ECC) account for 49 per cent of the total employment in the sample.

Table III.3 shows the average number of employees per firm in each ownership-location group. It comes as no surprise to learn that the two French-speaking groups are the smallest,<sup>1</sup> while American-owned firms are the largest. The range is fairly extensive.

Table III.3

Average number of employees per firm by ownership-location group

Ownership-location	Average number of employees per firm
FCQ	690
ECQ	4,730
ECC	3,810
ForFrQ	375
UKQ	3,680
USQ	4,810
USC	10,290
Total sample	4,020

## 2. National and regional firms

Employment totals for all ownership-location groups are shown broken down by region for both national and regional firms in Table III.4.

In the sample, national firms are dominant, as indeed they are in the Quebec manufacturing sector as a whole. Of the 41 firms participating in this project, 25 (61 per cent) are national, and they account for 78 per cent of total employment. The average number of employees per firm in the sample as a whole is 4,020. In national and regional firms, the comparable figures are 5,140 and 2,260, respectively.

The percentage of French Canadians in the total work force, as shown in Table III.4 is, of course, much higher in the case of regional firms (80 per cent) than national firms (33 per cent), reflecting the sample selection criteria noted earlier. Employment by regional firms in Ontario, which is quite small (and 50 per cent French Canadian), is mainly concentrated in areas of that province where the proportion of French Canadians is relatively high. There are no ECC or USC firms in the regional sample.

When we look at employment in Montreal and other Quebec the difference becomes even more marked. In Montreal, the percentage of total employment which is French Canadian is 66 per cent in the case of regional firms and 57 per cent in the case of national firms.

Table III.4  
Total employment by region for regional and national firms

Region of employment	Total regional employment			Employees whose mother tongue is French
	Total number of employees	Percentage of group total	Percentage of grand total	
National (25 firms in group)				
Montreal	23,112	18	14	57
Other Quebec	31,944	25	20	81
Atlantic provinces	6,664	5	4	13
Ontario	51,787	40	31	4
Western provinces	15,019	12	9	1
Total all regions	128,526	100	78	33
Regional (16 firms in group)				
Montreal	13,148	36	8	66
Other Quebec	21,760	60	13	90
Atlantic provinces	42	-	-	13
Ontario	1,098	3	1	50
Western provinces	95	-	-	1
Total all regions	36,143	100	22	80



Table III.4 (cont'd)

Region of employment	Total regional employment		Employees whose mother tongue is French	
	Total number of employees	Percentage of group total	Percentage of grand total	Percentage of regional total
Total: National and regional (41 firms in group)				
Montreal	36,260	22	22	60
Other Quebec	53,704	33	33	85
Atlantic provinces	6,706	4	4	13
Ontario	52,885	32	32	5
Western provinces	15,114	9	9	1
Total all regions	164,669	100	100	43

Comparable figures for employment elsewhere in the province of Quebec are 90 per cent and 81 per cent. The proportion of French Canadians is higher than in Montreal in both cases, but the difference between the two groups of firms is still significant. We would conclude that the scope of operations does make a difference in those policies and practices which affect the composition of the total labour force, at least.

The bottom section of the table, which relates to the sample as a whole, shows that the percentage of French Canadians employed in each region follows, more or less, the distribution of French Canadians in the total population given in census data. For Montreal, the proportion is 60 per cent, and for the rest of Quebec, it is 85 per cent. It is much lower in the Atlantic provinces, Ontario and Western Canada at 13, 5 and 1 per cent, respectively.

### *B. Patterns of Sales*

Table III.5 shows, for companies in each ownership-location group, the percentage breakdown of sales by type of purchaser: the general public, industrial buyers, and all other buyers. This enables us to evaluate the representation in the sample, of producers of consumer goods and of industrial goods, and it also gives us a preliminary estimate of the relative degrees of attention given to each of these segments of the market by companies in each ownership-location group. Table III.6 shows the percentage breakdown of sales by region, including exports.

It should be noted that both these tables are designed to show the relative importance of various parts of the market to sample companies, irrespective of the size of the companies. Therefore, total sales of all companies, whether small or large, are given equal weight. This corresponds to our decision, discussed in Chapter II, to give each company a "weight" equal to that of all others in the sample.

The data given in Tables III.5 and III.6 will be examined in more detail in Chapter XII (Purchasing and Marketing), where the effect of patterns of sales on the development of policies and practices will be explored. Our present concern is to see how these figures help to define our sample.

In Table III.5, we note that our selection criteria are reflected in the approximately equal emphasis given to sales to industrial buyers and the general public (41.4 and 42.0 per cent, respectively, for all sample firms), since sales to these purchasers correspond quite closely to the split by type of product between industrial materials and consumer goods. Sales to other buyers (including governments, institutions and construction companies) include products in both categories.

Table III.5

Distribution of sales\* by type of purchaser (percentages)

Ownership-location group	No. firms	Sales to industrial buyers	Sales to general public	Sales to all other buyers
FCQ	6	12.4	75.0	12.6
ECQ	13	58.0	26.6	15.4
ECC	4	24.1	67.9	8.0
ForFrQ	3	34.3	27.3	38.4
UKQ	5	39.0	57.0	4.0
USQ	7	41.7	32.5	25.8
USC	3	22.6	56.5	20.9
Total	41	41.4	42.0	16.6

\*Not weighted as to sales value (sales of all sample firms are given equal weight).

The breakdown of sales for each ownership-location group gives us some indication of the market opportunities perceived and grasped by management of companies in that group, and we note that the range of values around the average figures cited above is fairly wide. Thus, FCQ, UKQ, ECC, and USC companies tend to place more emphasis on sales to the general public, while ECQ and USQ companies seem to devote more attention to the manufacture and sale of products for industrial purchasers. This suggests perceptible differences in policies and practices of Quebec-based companies, but we cannot draw the same conclusion regarding companies based elsewhere in Canada. In the case of the latter, our sampling criteria specified that sample companies should have manufacturing operations of a significant size in Quebec or adjacent bilingual-bicultural regions. This introduces a bias in favour of consumer goods producers, because, for them, considerations such as transportation costs and ready access to markets often encourage the decentralization of manufacturing facilities. Thus, a company based elsewhere in Canada will be much more likely to have relatively large manufacturing operations in Quebec if it is a producer of consumer goods than if it is a producer of industrial materials.

Table III.6, which shows the percentage distribution of sales by region, indicates that overall, sample firms give approximately the same emphasis to sales in Ontario as to sales in Quebec (31.7 and 33.5 per cent). The regional distribution of sales by each ownership-location group, however, deviates from the average in an interesting pattern. Thus, firms for which the language of ownership is French (FCQ and ForFrQ) sell over half their output in Quebec, while firms belonging to the English-language ownership groups tend to exhibit a more even distribution of sales among all regions. Further, English-language firms based in Quebec (ECQ, UKQ and USQ) appear to

Table III.6  
Percentage distribution of sales\* by region (41 firms)

Ownership- location	Quebec	4 Atlantic provinces	Ontario	4 Western provinces	Total Canada	United States	Other countries	Total exports
FCQ	53.8	4.9	24.1	10.5	93.4	5.3	1.3	6.6
ECQ	27.3	4.8	32.2	13.5	77.7	15.2	7.1	22.3
ECC	30.3	6.8	43.4	12.3	92.7	2.5	4.8	7.3
ForFrQ	57.3	5.4	18.2	10.2	91.0	5.7	3.3	9.0
UKQ	40.1	4.2	27.8	8.8	80.9	12.1	7.0	19.1
USQ	25.7	4.5	35.1	14.5	79.7	13.0	7.2	20.3
USC	26.3	8.4	38.3	24.7	97.8	0.8	1.4	2.2
Total	33.5	5.2	31.7	13.4	83.8	10.7	5.5	16.2

\*Not weighted as to sales value (sales of all sample firms are given equal weight).

be very active in export markets. In part, this is due to the fact that these groups include many firms which are resource-based (such as pulp and paper) or are engaged in heavy engineering. Ownership-location groups which are biased in favour of consumer goods producers, such as ECC and USC, export a relatively small percentage of their total output.

### *C. Management's Perception of the Bilingual-Bicultural Problem*

The degree of adaptability of large manufacturing firms to current changes in French Canada, and the direction of their response, depends not so much on the problem of bilingualism and biculturalism (however it is defined), as on management's perception of it. To test this, we asked the following question early in our interviews: "Has the question of bilingualism and biculturalism *as such* been of sufficient importance to your company to have given rise to a specific item on the agenda of your executive committee recently?"

We did not, of course, expect only a direct answer. Certainly, there are no firms in the sample that are unaware of current changes. In all firms, managers are more than just aware, and they are talking informally about the matter both inside executive committees and outside. But they are not talking in the abstract terms used in the question. Most often, the "question" of bilingualism and biculturalism is expressed in terms which are meaningful to the firm, and which derive from the way in which businessmen perceive current changes. This is what we hoped to obtain from our "icebreaker" question.

Concrete expression of the question took many forms in our interviews. Many executives of English-language companies put it in terms of employment of French Canadians and the greater use of French in the workplace, while others were concerned about the climate for investment and long-term economic growth in Quebec. Quite a few expressed the problem in terms of relations of industry with the government of Quebec, and some have contemplated what effect the separation of Quebec from the rest of Canada might have on the firm's structure and organization.

#### *1. FCQ firms*

Among French Canadian-owned firms, most concern is in the area of marketing (both within and outside Quebec), in the role that business should play in encouraging French Canadian nationalism, and in purity in the use of the French language in the workplace.

Nearly all FCQ firms reported that the fact that ownership is French-speaking does give them an advantage in markets in Quebec, but that it appears to make no difference in other parts of Canada where, according to them, factors such as price, quality and service are considered to be of prime importance to the buyer. In two cases we were told that sales managers in a few regions outside of Quebec had



reported that sales were suffering because of the company's French Canadian image. This experience was not confirmed in other parts of Canada, and the reports were interpreted by management as excuses for generally poor salesmanship. In one case, the sales manager was replaced and sales outside of Quebec resumed their expansion. One manufacturer of industrial equipment made an abortive attempt to enter the Ontario market after the Second World War. When it failed, the company confined its operations to Quebec until new management came in. Products were redesigned, product lines were expanded, and the company reopened its Toronto office—this time with much more success. The firm is now second-largest in its field in Canada.

Nearly all FCQ firms in the sample are critical of the "buy-Quebec" policy currently being pursued by the Quebec provincial government and Hydro-Québec. To them, this policy constitutes the most serious single barrier to continued expansion of their markets outside Quebec, while it does not, apparently, help them much within the province. Some sample firms support the Conseil d'expansion économique, a privately-sponsored organization which stresses the importance of educating the Quebec consumer and the Quebec manufacturer in the advantages of a buy-Quebec policy. The Conseil feels that the "dollars-and-cents" argument is the only one the English Canadian businessman can understand, and it believes that a private organization is in a better position to promote economic solidarity than the provincial government, the efforts of which are necessarily less powerful, less specific and less flexible. The objective is to support firms which are owned by French Canadians, and to encourage them to improve the quality and appearance of their products. At present, only French Canadian-owned firms can join the organization, but it is intended to open up membership later to firms owned by other language groups which "respect the culture and the language of French Canadians." So far, sales by member firms outside of Quebec do not appear to have suffered as a consequence of the firms' support of a buy-Quebec, or buy-French Canadian, policy.

If some French Canadian-owned firms do not think the provincial government has gone far enough, others are a little uncomfortable with the extent to which it has gone already. The general manager of one firm, speaking in 1965 when the Liberal party formed the provincial government, expressed the feeling that if Mr. Lesage should ever leave his position as premier "some of his possible successors could cause difficulties." The company, which manufactures consumer goods and sells them all across Canada, cannot perceive any advantage or disadvantage, either in Quebec or elsewhere, stemming from the fact that its plant is located in Quebec. But it is not overlooking the possibility of buying out a small competitor in Ontario and switching some of its production to that province to protect its markets outside Quebec in the event of separation.

Many FCQ firms are concerned about the quality of spoken French in their manufacturing operations. In general, most report that the quality of language has improved within the last 10 years, mainly

owing to improvements in the educational system and the fact that young people are staying in school for a longer period before starting work. One company executive did not mention improvements in education, but stated that the introduction of French-language television had had a marked effect. Words such as "foreman," "boss," "shipping," and "maintenance" are used less often in spoken French in the plant, having been replaced by *contremaître*, *patron*, *expédition* and *entretien*. However, more technical terms are still expressed in English, because the French equivalent is either obscure or non-existent.

Some companies feel it is incumbent on them to take measures to improve the quality of French used. Some have made up a lexicon of equivalent French terms, some have replaced signs in the plant and plates on machinery (originally installed in English by the American or Canadian manufacturer) and some encourage the use of proper French language in written reports. In all cases, the effort is said to be difficult and expensive and "not justifiable in economic terms." One or two companies reported that they do not feel it is necessary for industrial firms to become involved in language education.

## 2. ECQ firms

Of the thirteen English Canadian-owned, Quebec-based firms in the sample, five replied that the question of bilingualism and biculturalism had not been discussed formally in executive committee recently, because the question was a familiar one, had been recognized many years ago and had, since that time, stood in the background of nearly every executive decision made in the firm. The remaining eight firms had also recognized the existence of the question many years ago, but recently they were giving some elements of it rather more detailed consideration. The distinction between firms that gave a "yes" answer to the direct aspect of the question and those that gave a "no" answer is therefore very slight.

In many ECQ firms, management regards the question of bilingualism and biculturalism in industry as involving principally the hiring and promotion of French Canadians. Since this is a relatively large subject, it will be discussed separately in other parts of this report.

In one or two cases, attention is being paid to the representation of French Canadians on the board of directors. As discussed in Chapter V, the extent of representation is already quite high in ECQ firms, and it would appear that these firms are simply catching up with the majority.

At least two ECQ firms have considered the possibility of moving their head offices to Ontario. In part, such a move would reflect a shift of emphasis in their markets or a relatively greater rate of expansion of manufacturing facilities elsewhere in Canada. However, the political climate in Quebec and problems of retaining English-speaking managerial and specialized staff were always cited as reinforcing factors.

A much larger number of firms reported that they have considered setting up separate divisions to operate in Quebec. These divisions would be staffed mainly by French Canadians and French would be the internal language of communication. In the event of separation, the Quebec division would be operated as a foreign subsidiary, assuming that ownership could be retained. In every case, it was stressed that a reorganization of this nature would be made very reluctantly since any breakup of the firm into smaller units would be sure to have an adverse effect on productivity and costs. Having in mind that the trend in other countries is in the direction of larger units which are able to enjoy lower costs and/or a more rapid rate of innovation, the fragmentation of Canadian firms, already relatively small, would be certain to result in a serious loss of competitive strength. English-speaking managers regard the possibility without enthusiasm, although they believe that they may be forced into it by political and social pressures.

What is perhaps more interesting is that every senior French Canadian executive interviewed expressed opposition to any organizational change which would split off Quebec operations from those located elsewhere in Canada. These men, who have already demonstrated good managerial competence and have competed successfully with their non-French-speaking colleagues, have no wish to see their horizons limited. They also recognize the validity of the economic arguments in favour of larger-scale operations, but beyond this, they believe that, in a cultural or social sense, the full development of their fellow French Canadians in the longer term would not be well served by providing a protectionist or "hothouse" environment for them. As one man put it: "The principal thing is opportunity. I've been given the opportunity and, so far, I've succeeded well. Now I don't want to see my opportunities limited, either by my company or by the politicians."

Another interesting observation was made by a Jewish executive, on the subject of the choice between assimilation or retention of "the proper French environment and French education." It was apparent that he had thought about the problem with sympathy and understanding, but he does not believe that the answer lies at either extreme. To paraphrase his comments:

The Jews face much the same problem as the French Canadians. We have our own language, our own religion and our own culture. We are proud of our heritage, and we wish to retain it. Some Jews have responded to the commercial pressures of the world by withdrawing into their parochial schools, into their synagogues and into their ghettos where they can preserve intact all aspects of the Jewish faith and culture. However, any Jew making this choice (which he is perfectly free to do) is bound to suffer economically, for he cannot participate in North American business. I do not believe that isolationism is necessary. I am proud of my heritage; I attend synagogue, and I can speak the language, but I have attended English-speaking educational



institutions and I have accepted English as my working language. So have most of the other Jewish businessmen I know. But I am still Jewish, and I do not believe that the Jewish culture, religion, or even the language, is disappearing.

Although no senior executive interviewed believes that industry should take an active role in bringing about cultural or social change, most of them feel that business should remain aware of its environment and adapt to social changes as rapidly as possible. The president of one ECQ firm came close to specifying an active role, however, in telling us that his company has, in effect, made a forecast of what social changes may take place, and has begun to enunciate new policies in anticipation of them. Most of those policies are designed to encourage the greater use of French in internal operations, and a definite effort is being made to hire and promote French Canadians for the staff. All senior executives have been taking French lessons, and the word has gone out fairly clearly to all junior executives that they had better become bilingual soon. The president reported that there is a definite cost involved in the pursuit of these policies, for it would be less expensive to carry on with English as the principal language of communication. However, the alternative is believed to be the possible destruction of the company's operations in Quebec within five, ten or fifteen years, and the president feels that survival is more important than short-run cost considerations. This is an essential part of the forecast the company has made.

### 3. *ECC firms*

Most ECC firms have their head offices in Toronto, and (owing to the operation of our sampling criteria, discussed in Chapter II) most are engaged in the production of consumer products. In general, their operations all across Canada are quite decentralized, and local plants enjoy a considerable degree of autonomy. Operations in Quebec, as noted earlier, employ a fairly high proportion of French Canadians at all levels, and bilingualism is quite common.

Since, in decentralized organizations, the head office group tends to be removed from day-to-day operations, its perception of conditions in Quebec (and indeed, anywhere else in Canada) is often received at second hand. Senior management people in ECC firms tend to take a more detached view of the current social changes in Quebec than do their colleagues in ECQ firms.

Plants in Quebec owned by ECC firms employ a large number of French Canadians, especially at the wage-roll level, and plant management and staff are expected to be bilingual. In the last five years or so, increasing efforts have been made to attract and train young French Canadians for supervisory and managerial ranks, and it was emphasized that they, as well as their English-speaking colleagues, must be bilingual. Often, in order to be promoted, the staff member must have experience in plants and sales offices in various parts of Canada.

Some firms have a policy of eventually converting all Quebec plants to French operations, and English-speaking employees are being phased out. Reports to head office are, however, still written in English.

The market is a very powerful influence on these companies, and a good deal of attention is paid to cultural differences as they affect advertising, the use of bilingual labels and patterns of consumption or preferences for slightly different product characteristics. In addition, great care is taken to ensure that salesmen are able to speak the language of their clients. Some companies feel that salesmen in Quebec must be French Canadian; a bilingual English Canadian would not do. Bilingual French Canadian salesmen, it is felt, suffer no handicap with English-speaking buyers.

ECC companies have given little thought to the possible removal of their assets or plants from Quebec. In fact, their investments in Quebec have been extended, and in some cases the manufacture of particular lines has been centralized in this province. Company executives say they "will continue to operate in Quebec until forced to leave— if that should ever happen."

#### 4. *ForFrQ firms*

Most ForFrQ firms are managed by Canadians (usually French Canadians), and the companies' image is therefore very similar to that of FCQ firms. Representation of French-speaking Europeans, if it exists at all, is generally confined to a single man at the level of managing director or the equivalent. These men, who are more accustomed to living and working in a multicultural, multilingual environment than are most North Americans, offered some interesting approaches to the problem now facing Canada.

One such man, a Swiss, told us that he believes the current problem is not one of language or communication at all. Language difficulties are only symptoms. The underlying malaise is the economic underdevelopment of French Canadians. If a solution could be found in this area, he believes, the language problem would solve itself. In the meanwhile, the language of operations within his company is adapted to the environment. Internal communication is in both languages, matching the language abilities of employees, and senior people in head office must be bilingual. People who deal with suppliers and industrial buyers must speak English, and salesmen of the company's consumer products in Quebec must speak French.

Commenting on his experience in Switzerland, this executive reported to us that, as a matter of courtesy, the tendency is generally to use the language of the superior, especially in industry-government relations. Also, a German-speaking Swiss transferred to a plant in French-speaking Switzerland knows that he must speak the language of the region. The language of business in Switzerland, however, is mainly German and (increasingly) English. The latter is particularly important for foreign business contacts, and most Swiss in senior



management are fluent in English. As an aside, this gentleman remarked that in his experience he had found the French, as a group, to be quite adamant in demanding the use of their own language. The only group that is *more* adamant is the English-speaking people.

In another firm, owned by interests in France, a French Canadian manager remarked that most European French businessmen seem to regard North America as unilingual English. Some of these men, we were told, compare the French Canadians with the Flemish people in Belgium, and wonder why they resist assimilation into the majority. It was noted that many French businessmen coming to Canada associate themselves, not with French Canadians, but with other non-French-speaking groups defined broadly as English Canadians, and that they take up the attitudes and ways of thinking of these groups. Within the firm, the great majority of employees are French Canadian, except for a small number of men holding positions such as general manager, chief engineer, sales manager, industrial engineer and draftsman. Most of these people are not bilingual. According to senior management, this situation has arisen because qualified bilingual candidates have not been available, but it is expected that conditions will change in the future.

#### 5. UKQ firms

In most UKQ firms the senior managers are Canadian, and their perception of the bilingual-bicultural problem is similar to that of managers of ECQ firms. In reply to our question whether the subject had been discussed recently in executive committee, the majority replied that it had not (not recently) because the question had been recognized for a long time.

As we shall see in later chapters, UKQ firms have adapted quite well to their environment. Some firms manufacture and sell consumer products and have come to know the Quebec market quite thoroughly; some have a French Canadian image as a result of purchase from French Canadian owners; and some are relatively new which, to some degree, makes the problem of staffing easier because the company can be more flexible in the beginning.

One firm that has been established in Quebec outside of Montreal for a relatively long time feels that it has a strong obligation towards the English-speaking community in the region of its plant. Many of these people were originally brought into the region by the company to start the plant, and their families have grown up in Quebec. According to the senior managers interviewed, the "quiet revolution" has meant that many English-speaking people in Quebec cannot easily find jobs at the wage-roll, or junior clerical, level any more, even though most of the younger ones are fluently bilingual. The company feels it has a responsibility to hire them, although it recognizes that this practice does limit, to some extent, the entry of French Canadians.

At the staff level, intensive efforts have been made by this company to attract young French Canadian engineers, and the number of French Canadians in senior positions is increasing. However, the company is susceptible to raiding by smaller firms in the industry, and staff turnover is relatively high. According to management, the company has come under severe pressures in recent years, ranging from government criticism to threats of bombing by fanatics. Apparently, it has been suggested to this company (and to others in our sample) that if it hired one or two French Canadians as top managers this "would help a great deal." The company rejected the suggestion on the grounds that its policy is to promote from within, and it is continuing to develop French Canadian engineers in its management training programme. Partly as a result of these pressures, partly because most of its managerial personnel is English-speaking, and partly because its markets are expanding westward, the company is giving some thought to the possibility of moving its head office to Ontario.

For one firm, a manufacturer of consumer products purchased from French Canadian owners, the question of bilingualism and biculturalism scarcely arose until it was decided to expand into the Ontario market and then to other parts of Canada. Since the company has a French Canadian image, some thought was given to changing its name. It was decided, however, that it would be better to concentrate on the quality and merchandising of its products, since these factors are felt to bear more weight in markets outside Quebec. When the campaign to expand markets was seen to be successful, no further thought was given to the company name and it remains French. Curiously, product labels had been printed only in English by the previous French Canadian owners, at a time when marketing efforts were restricted to Quebec and the bulk of sales were made to French Canadian buyers. One of the first things the new owners did was to print bilingual labels. These have not been changed for products shipped to markets elsewhere in Canada.

The president of another UKQ firm expressed his perception of the bilingual-bicultural problem in terms of adaptability to permit fullest use of resources, particularly resources of skilled or educationally-qualified people. He reminded us that in the early days his firm, like many others, had relied upon the United States and Great Britain to supply specialist and managerial staff. The practice had resulted in such a large proportion of non-Canadians in management positions in his company that he had been told, upon graduation from university, that he was "crazy" to go to work for such a company: his chances of promotion were nearly nil. As time went on, manufacturing firms like his own had turned to English-speaking Canada for educationally-qualified people, then to Britain and Europe (during the postwar surge of immigration), and now to French Canada. From the companies' point of view, the principal thing is to ensure a continuing supply of trained people, and all available sources must be tapped. In time, the proportion of French Canadians in senior

management will increase, not because of any desire to ensure proportional representation ("the company is not like the Senate"), but because of the emphasis put on each individual and how he matches the requirements of his job.

Like several other executives interviewed, this company president was quite concerned about the attitudes of English-speaking people outside Quebec, and especially those in Toronto, where he was born. After discussing at some length the apparent isolationism of Torontonians, he remarked that he believes the rest of Canada must learn to live with Toronto just as much as it has had to learn to live with Quebec. He concluded by saying that the perception of the bilingual-bicultural problem in Toronto is very slight and a significant danger to Canada.

#### 6. *USQ firms*

Perception of the bilingual-bicultural problem by management appears to vary over a broader range in American-owned firms than in any other ownership group.

In some firms, where technological and managerial techniques are very highly developed, the overriding emphasis is on the individual and his performance, without regard to his language or cultural background. In the mind of executives of these firms, it is wrong to base a study of industry on bilingual-bicultural matters because it tends to shift emphasis away from business and from the individual and concentrates attention on groups of people, on differences between them, and on social factors which are only a part of the business environment.

In other firms, particularly those purchased from French Canadian ownership, adaptability is very high, and separate divisions may operate quite autonomously, each retaining its former patterns of language and employment. In these firms, the bilingual-bicultural problem is seen as affecting chiefly an expansion into new market areas, or in the relations between plants or divisions and head office (the language of business at this level is English).

In some American-owned firms operating as part of a worldwide network managed by the "international division" of the parent companies, conditions in Quebec are viewed as no more special than conditions in South America or Europe. In many cases, the solution has been to create a French Canadian image, and to adapt to local conditions to the greatest extent possible—up to, but not including, communication with the parent company.

In direct answer to our question whether the matter of bilingualism and biculturalism had been discussed recently in executive committee, most company executives reported that it had. In one firm, the chairman of the board had given a series of talks to the senior managers of the parent company, on conditions in Quebec. In another, implementation of a policy to fill all management positions with French Canadians had been receiving careful attention.



In one firm, with plants in many regions in Eastern Canada, managers have been making concerted efforts to define and pinpoint recent changes in Quebec, and to alter the company's policies to conform more closely to the environment. Most of these policies have been related to staffing at the plant management level and French-language training for senior executives. Another firm with only one plant, which is located in Montreal, has concentrated almost all of its attention on employee relations and hiring, since virtually all sales are made outside of the province.

In one case, we were told that the company is giving active consideration to moving its head office to Ontario.<sup>2</sup> The company has been giving close attention to the "new wave" in Quebec, and its possible effect on company operations and investment. It was stressed that management did not feel it was taking an extreme view, but that it felt the company should be ready for any contingency.

#### *7. USC firms*

USC firms are very similar to ECC firms in all respects. The managers of both groups are usually English-speaking Canadians, and most sample firms in both are engaged in the production and sale of consumer goods. Decentralization is common, and plants or divisions in Quebec, like those in other parts of Canada, operate fairly autonomously. Managers of the Quebec operations are well aware of current changes in the province, while head office management is necessarily more remote and, understandably, preoccupied with other problems as well as Quebec's.

The fact that company management must concern itself with local conditions in many parts of the country could mean that corporate policies on bilingualism and biculturalism would be less flexible. Decentralization, to the extent that it can be implemented within the overall corporate structure, helps to circumvent the problem, but promotional policies requiring a high degree of employee mobility, and the fact that senior management is located in Toronto, have the effect of reducing the proportion of top jobs held by French Canadians.

In matters affecting marketing, adaptability is quite complete. Bilingualism and representation of French Canadians in the sales force are high, as is the extent to which bilingual labelling and advertising are employed. Bilingual labels are generally used for all products, including those sold in all parts of Canada, one reason being that the cost of split runs (with different packaging for Quebec) would be too great.

Most USC firms are expanding their investments in Quebec, although these investments are still a relatively small proportion of their total assets. The general feeling of management is that the economy of Quebec is moving ahead rapidly, and USC firms wish to take advantage of increasing purchasing power in this province. Having

investments in productive facilities in Quebec is felt to be an advantage in protecting this part of the market.

In several cases, managers expressed the belief that an appeal to nationalism has no effect on sales. Consumers will buy the product that suits them without regard to where it is made. (The same opinion is held by FCQ firms, with respect to their sales outside Quebec.) Some years ago, in response to political and social pressures, a number of American-owned companies undertook to create a Canadian image. Management feels that, although their action appeared to satisfy the forces exerting the pressures, the effect on sales was negligible.





In many of our interviews with senior executives of sample firms, a simplified model of the communications network in which the firm operates was used as a starting point for a discussion of the factors determining the language of business. This is illustrated in Figure IV.1, which depicts lines of communication between various elements in the system.

As the figure shows, internal communication between managers and employees is only a part of the problem. Communication must also be maintained between owners and managers, between people in the production-distribution system (including suppliers of materials, the firm itself, and the firm's markets) and between the firm and other institutions affecting its operations.

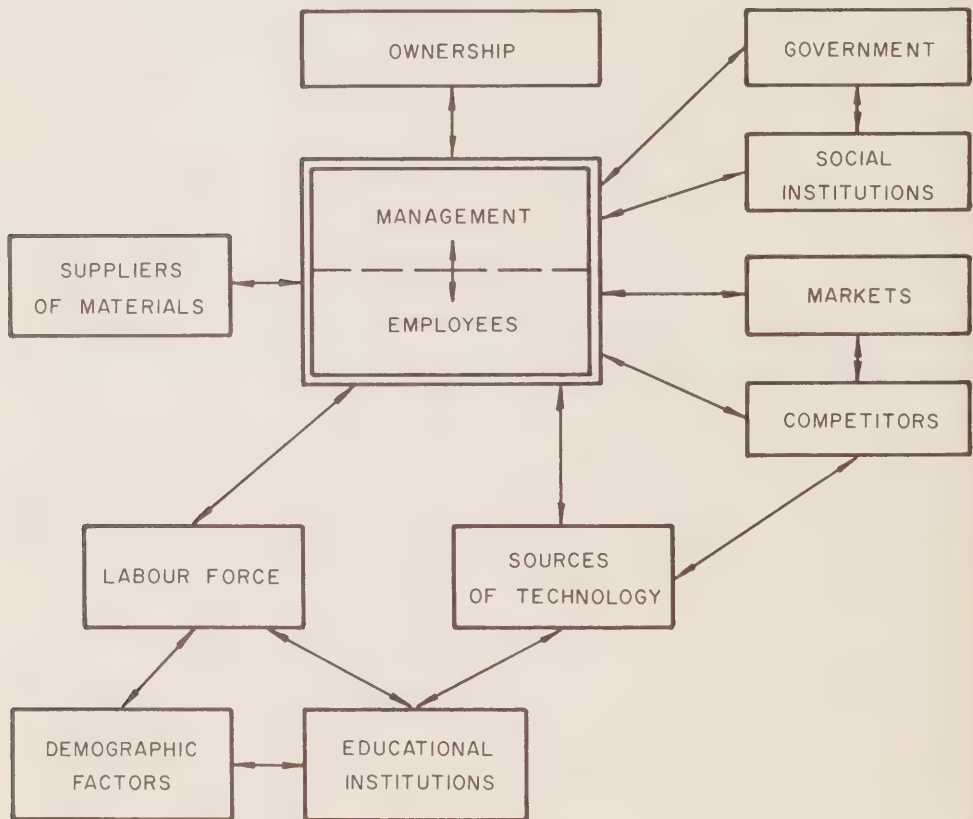
The degree of importance of each of these lines of communication will, of course, vary from firm to firm. Some operations are labour-intensive, some depend on a continuing flow of up-to-date technological information, and some are heavily market-oriented. Others, particularly those based on natural resources, may depend on government goodwill. The relative importance of each operation within the organization will determine the pattern of the firm's communications.

It is evident that the model is greatly simplified, since it shows only some of the lines of communication. There are, for example, additional direct links between competitors and suppliers of materials, between educational institutions and social institutions, between the population and government, and between the market and nearly all other institutions. In addition, within the firm, it is difficult to draw a line between managers and employees generally. Nevertheless, the sketch is sufficient to show that the lines of contact are many and that the interrelationships between them can be quite complex.

Most managers interviewed were well aware of the interactions between all these factors, although they might not have visualized them in quite such an abstract manner. The way in which these influences

Figure IV.1

Lines of communication between the firm and its environment



determine the language of business evidently depends on the scope of the firm's operations. Firms that operate entirely within a unilingual English environment in Canada are not included in this study, although some firms that might operate in a unilingual French environment are. In the main, however, all sample firms are exposed to both languages.

#### A. Ownership

The language of the owners of nearly all firms has relatively little *direct* effect in determining the language of business. In smaller firms, ownership and management tend to be the same, but with this single qualification: the starting point is the mother tongue of the managers and the firm will operate in that language unless other factors counteract the tendency. There are some firms in the sample where the language of the ownership is English, but the firm has a French-language image owing to deliberate policy or historical development, such as the purchase of the firm as a going concern from French-speaking owners. In a few cases, the language of the owners is French, but the firm operates principally in English at the managerial level owing again, to deliberate policy or historical development, such as the promotion of English-speaking employees originally selected because they possessed the required skills and educational qualifications. If the sample firm is a subsidiary, the language used by the managers of the parent company has greater influence than the fact of ownership as such, because of the operational requirements of financial and technical liaison.

Ownership does have a powerful *indirect* effect on the language of business, however, through the selection of senior management personnel. The cases noted above are interesting exceptions, but as shown in Chapter V (Executive Officers and Directors), the mother tongue of senior managers is usually the same as that of the owners. There are, for example, no English-speaking presidents of French-language companies, although one or two French Canadians are presidents of English-language companies (but they are fluently bilingual).

#### B. Management

Once a particular ethnic or cultural pattern has been established in the senior management group, it tends to perpetuate itself in the selection of new members, and this also has a powerful indirect effect on the language of business. What we are referring to here is not discrimination (at least not in the overt, or unpalatable, sense of the word), but habits that busy men develop, perhaps unconsciously, in finding the quickest or most efficient or least uncertain way of getting things done. The phenomenon stems from the fact that the "language of communication" in small, highly coordinated groups is

often unspoken, or at most, it consists of a mixture of short phrases and esoteric terms which cut to the root of the problem at hand, in the sure knowledge that everyone concerned shares the same predisposition and accepts the same axioms. In such circumstances, any member of the group attempting to argue a point in committee will often know, just from his intuitive "feel" of the atmosphere without a word being spoken by his colleagues, whether or not his point is being accepted. In superior-subordinate relationships, a similar phenomenon is observable; it was described by one executive as "knowing whether I am getting through to him."

Factors such as these count very heavily in the selection of colleagues and understudies. They reflect not only the mother tongues of the people involved, but also their educational backgrounds. An engineer, for example, will feel that he can work better with another engineer than with a chartered accountant, because the former will tend to take the same approach to a problem, "and less time will be lost explaining what we are trying to do."

A well-rounded management group will probably include men of diverse academic backgrounds just because of the importance of the different skills and points of view which they are able to offer. Thus, some degree of effort will have to be made to overcome the natural affinity of like for like. Different language and cultural backgrounds provide an additional barrier, however, and the contribution these can make to the management group must be both meaningful and recognizable before the extra effort in assimilating them will appear worthwhile.

What is involved, then, is not only language, but also (and perhaps, more important) cultural background. The additional barrier to clear communication that these impose, over and above differences in educational backgrounds, was stated in a most effective manner by a French Canadian executive of one of the sample firms, during an interview. Noting that he, as well as both interviewers (one from l'École des hautes études commerciales de Montréal and the other from the Graduate School of Business of McGill University), had graduated originally in Engineering, he said:

Now suppose there was a project to be done, and I had to work with one of you. I know nothing about either of you except that one took Engineering at l'École polytechnique, and the other at McGill. If the job had to be done quickly, I would rather work with the graduate of l'École polytechnique because I went there myself and I feel, just because of that and because we are both French Canadians, we could get to work right away and understand each other within a few hours. If I had to work with the McGill graduate, it might take three or four days together before we both knew what to expect of each other.

As mentioned earlier, it is not impossible to overcome the tendency for like to prefer like. In varying degrees, the effort must always be made in any business organization. But it takes additional effort,



and more time, to cut across cultural and language differences, and the effort must be considered worthwhile in this case, as in any other.

Referring once again to the model depicted in Figure IV.1, we can now look at some of the "external" factors and examine how, in the opinion of management, they influence the language of business.

### C. Suppliers

Manufacturing firms obtain most of their supplies of materials from other industrial concerns in which, with very few exceptions, the language of business is English. This is, of course, the case where suppliers are located in Canada or the United States (which covers most instances), but we were frequently reminded in our interviews that English is also the usual language used in international trade by firms located in Europe and Japan.

Thus, for English-language firms in the sample, the influence of suppliers tends to reinforce the use of English within the firm. In firms where the internal language is French, the influence of suppliers tends to introduce the use of English although, in general, the customer can elect to use whichever language suits him best, especially if his purchases are relatively large. However, transactions involving industrial supplies often must employ a fair amount of technical terminology, and often it is inconvenient or impossible to use a French translation. The result usually is that communication is carried on in both languages. In any event, French-language firms, like their English-language counterparts, place much more emphasis on other conditions surrounding the purchase, such as price, terms, continuing availability and quality. These factors have a direct bearing on costs and profit; the language used in purchasing does not.

English-language firms reported to us that, for small purchases of materials available locally, they usually employ bilingual purchasing agents in plants located in Quebec. In their dealings with local suppliers, most of whom are French-speaking, they generally use French.

For some resource-based industries, such as pulp and paper, the principal supplier of input materials is the Quebec provincial government, in its role as administrator of crown lands and timber-cutting rights. The provincial government's use of its monopolistic position to assert provincial rights and powers, and to promote policies designed to make residents of Quebec "*maîtres chez nous*" tends to introduce considerable uncertainty into the situation, particularly since cutting rights are renewable each year. From the companies' point of view, the provincial government's attitude looks like French Canadian nationalism. As for language (which is only a small part of the question, although it is one of the most noticeable aspects), French

is now mandatory. In many firms, woodlands operations have been carried on in French for some years, owing principally to the nature of the work force (almost all employees are French Canadian) and the fact that operations are often isolated in remote parts of the province. Thus, the people who manage woodlands operations, if they are not French Canadian, are usually fluently bilingual, and they encounter few difficulties in their contacts and negotiations with provincial government officials.

Because of the vital need to maintain good relations with the provincial government, however, the use of French by these firms is more than just a matter of adaptability. A French Canadian senior officer of a Quebec-based, English Canadian-owned pulp and paper firm reported to us that he understood the provincial government had recently returned all documents submitted by one of his firm's competitors, because they were in English. Asked if in such a situation he would send them back and insist English is an official language in Quebec, he replied, "In the position we are in, we would translate the documents into Sanskrit if they wanted it that way!"

We should stress that we found no evidence of hostility on the part of sample firms. Relations between them and the government of Quebec seem to be as good as relations ever are between government and industry (particularly resource-based industry). But in view of current developments, management is conscious of increased uncertainty, and it is very watchful.

#### *D. Labour Force*

One of the most powerful determinants of the language used within the firm is the mother tongue of the majority of its employees. Whenever either French or English is the mother tongue of the majority of people at all ranks in the organization, that language will generally be used for all internal communication, and adaptation to the other language will be provided for, whenever necessary, in external contacts. It is only where the main language spoken is different for employees at different levels in a plant, or in plants located in different regions, that bilingualism becomes a matter of concern in internal operations.

The characteristics of the total work force depend, naturally, on the labour force—that is, speaking very broadly, the availability of people who are qualified and willing to work for the firm in question. On the wage-roll level, the dominant mother tongue of employees will be that of the local labour force, which is determined in turn by the local population. In most plants located in Quebec, therefore, the great majority of wage-roll employees are French-speaking. In the case of salaried employees, however, special qualifications or educational backgrounds are usually a prerequisite, and the local population is, in many cases, not able to supply all requirements. Since these people often have to be "imported" from other regions or other

countries, their mother tongue is not necessarily the same as that of the local population. Further, as shown on the model, the influence of educational institutions (both local and remote) becomes significant. Until recently, for example, education in some advanced business and technical fields has been more readily available in English than in French.

In general, management of all firms in our sample view the labour force factor as the main influence encouraging the use of the "other language." In firms where the language of management is English, the main factor (sometimes the only factor) encouraging the use of French is the work force—principally, but not exclusively, wage-roll employees. In French-language firms, it is usually the salaried specialist who introduces English into internal communication, reinforcing external factors such as sources of technology, suppliers, and markets. Some firms try hard to avoid this complication. One FCQ firm reported that it spent five years looking for a qualified French Canadian engineer to take charge of its research and development department. It was not successful and finally hired an English Canadian who is, unfortunately, not bilingual.<sup>1</sup> On the other hand, management of another (larger) FCQ firm made a policy decision, on the occasion of taking over control of the company, to retain the services of its English-speaking senior management personnel. Two reasons were given to justify this policy: (1) the largest part of the firm's market is English-speaking, and (2) the firm needs managerial competence, and elimination of the English-speaking element would limit its choice of employees too severely.

Recently, as graduates in engineering and commerce from French-language universities have increased in number and in willingness to work in large corporations, English-language firms have been making efforts to hire those people and, correspondingly, introduce the use of French at supervisory and management levels in their plants in Quebec. This is being done in an effort to match the language preferences of the majority of their wage-roll employees. This subject, which is too large to be treated here, is discussed in Chapter VIII.

#### *E. Sources of Technology*

All firms in all ownership-location categories reported that increasingly sophisticated manufacturing and other technologies are a powerful inducement to the greater use of English in their operations. The very considerable importance of the English-speaking nations (particularly the United States) in the worlds of science and commerce was often alluded to, and we were frequently reminded that the language usually employed to transfer information on new technical, managerial or commercial developments (even between non-English-speaking countries) is English. In general, the greater the degree of technical sophistication, the stronger is the influence of English on the firm's internal operations. Not all firms see it as being

necessary or worthwhile to be in the vanguard of new developments, however. In some firms, where the production process is fairly simple and innovation is not an important factor, the influence of the language of technology is not great. But even here, at the very least, French-speaking engineers and technicians are expected to be able to read technical literature in English.

The influence of educational institutions, particularly the universities, is felt through this route also, as shown on our diagram (page 50). In discussing the firm's work force we had in mind the role of the educational institutions in providing graduates who would work for business firms and we were concerned, in that context, with the language of instruction. Now, in examining the impact of the sources of technology, we are reminded that educational institutions also train people for research and development of new technologies, and often sponsor research in these fields themselves. The fact that many of these institutions are English-speaking, and that most of the rest make use of texts, references, and research material published in English, is further inducement to the use of English within the business firm, as noted above.

#### *F. Markets*

On balance, the influence of the language used in consumer markets on internal operations is small. This may at first appear to be surprising, but on the whole, consumers have little contact with people inside the firm. As we shall see in Part 2 of Chapter XII (Marketing), sample firms adapt very well to differences in language patterns in consumer markets, by ensuring that their salesmen have the proper language qualifications, and through the use of advertising agencies employing specialists able to speak both languages. The firm's direct contact with buyers of its produce, however, begins and ends with its salesmen.

Manufacturers of industrial materials and machinery, on the other hand, meet buyers of their product at many more levels in the organization. Because of the nature of the produce, and because the number of buyers is usually quite small, liaison is necessary in the areas of production, engineering, research and development, quality control, and finance and accounting, as well as in sales and general management. If the buyer (usually another firm) is located outside Quebec, the normal language of business is nearly always English. If the buying firm is located in Quebec, the fact that contact is made through specialists or senior management people often means, also, that English is the preferred language.

Among FCQ firms manufacturing industrial goods, marketing is the only functional section in which a unilingual English employee can rise to a senior managerial position. It is preferable, however, that he be bilingual. For many French-language firms, extension of



their markets to other parts of Canada and to other countries is making bilingualism a necessity.

Market considerations do encourage English-language manufacturers of industrial goods (principally machinery and equipment), to use French when buyers are French-speaking. Very often these buyers are governments—either municipal or provincial—and the relations are similar to those faced on the supply side by pulp and paper manufacturers. Some companies (including ForFrQ, as well as English-language firms) feel it is of paramount importance to have French Canadian (not just French-speaking) salesmen deal with these customers, and it is to the firm's advantage to submit bids in French or in both languages.

How great an advantage this may be is difficult to say. The president of one ECQ firm, which normally sells nearly all of its output outside Quebec, reported having submitted a bid for equipment to Hydro-Québec. The company submitted the lowest tender and it got the contract. Even so, it was the president's impression that what appeared to be more important was the fact that the bid (a fairly long and complicated set of documents) was submitted in both French and English and that there were French Canadian officials of the company present at the negotiations. After the contract had been signed, Hydro-Québec officials noted to the president that his firm was the only one to submit a bid in French. It is the president's feeling that had other things, especially price, been equal, his company could have stood to benefit from having pursued such a policy.

#### *G. Government and Social Institutions*

The influence of the Quebec provincial government in determining the language of business is exerted most directly through its role as buyer and supplier. In both roles the government tends to encourage the use of French, as we noted above. In a more general sense, the provincial government and some social institutions have an indirect influence on business—also in the direction of encouraging more use of French—through their appeal to businessmen as individuals. Since these factors are well documented elsewhere, we shall restrict our comments to a mere mention at this point, in order to complete the analysis of the model. The influences show up in many areas, however, as later sections will show.

#### *H. Summary*

Once a pattern of using either English or French has been established in a firm, it will tend to perpetuate itself unless external factors bring about a change. Our survey shows that changes are occurring, and that they are in the direction of bilingualism in every case studied, not in the direction of either unilingual French or unilingual English.



One of the characteristics of a successful business firm is that it adapts well to changes in its environment. It adapts particularly well to changes that affect its profitability and survival in the long term. It takes additional effort, and more time, to cut across cultural and language differences, and the effort must be recognized to be worthwhile in this case, as in any other.

The chief factors that make the effort worthwhile in French-language firms are the availability of qualified managerial or specialist personnel, sources of technology, and markets outside Quebec. For English-language firms, the chief factors are good employee relations (especially at the wage-roll level), markets in Quebec, and government and social pressures.

It is apparent that, in general, the factors operating to encourage the use of English are more directly (or more obviously) related to profits than are those tending to encourage the use of French. The major exceptions to this would be those English-language firms that are most vulnerable to government action, such as firms in the resource-based industries.

*A. The Role of Management*

The last chapter drew attention to the central role of management in the communications network of a business firm, and to the influence that the ethnic or cultural pattern of senior management has in determining the firm's language of business. Chapter VI will offer a fairly detailed analysis of the mother tongue and bilingual ability of salaried staff (including managers), but first it may be worthwhile to take a closer look at senior management (defined here as the top 10 executives of each company) and examine the representation of French- and English-speaking people in these positions.

In evaluating the role of management with regard to bilingualism and biculturalism or any other aspect of business practice, we have to bear in mind that people in senior managerial positions do not enjoy complete freedom of action. The business firm of today operates within a complex network of interacting and interdependent controlling influences that impose fairly tight limits on the exercise of managerial power. In large firms particularly, it is quite impossible for managers to direct the course of development along lines that will suit only their own preferences. Rather, it is the job of managers to comprehend, organize and combine influences emanating from many sources (both internal and external) in such a way as to help realize the firm's objectives. Once the objectives have been stated, these influences are usually interpreted as resources and constraints. Resources (those factors of which the firm can, or should, take advantage) include such things as the availability of men, materials and technology, or access to markets and lines of credit, while constraints include physical or economic limitations on the availability of resources, as well as legal, social and ethical barriers.

All of the foregoing is very general, but so is the problem of bilingualism and biculturalism. Our starting point is that there is no problem of bilingualism and biculturalism, as such, facing business, but that the problem constitutes an element of almost every

controlling influence in the network. The degree of importance, of course, varies from one influence to the next and from one firm to the next.

As noted above, management is not free to direct the firm's affairs according to its own predisposition. It must operate within the system. But this does not mean that management's role is passive. The way in which the firm's objectives are set, and the patterns they take (whether implicit or explicitly recognized) differ greatly among firms. The effect of managerial power also differs widely according to the way in which controlling influences are perceived, and according to the relative importance attached to each factor. There is plenty of scope here for individual differences, and some room for personal preference or habit, but the most successful manager is the one who combines the factors available to him, and adapts to changing circumstances, in a way which will best accomplish the firm's objectives, not his own.

#### *B. Executive Officers*

Table V.1 indicates the mother tongue of the 10 most senior executives of the 41 companies in our sample. Here, as well as in the next section relating to directors, the breakdown by mother tongue is extended to include other languages besides English and French. This is the only chapter in which this additional distinction is made and it is intended to reflect, principally, special conditions encountered in ForFrQ firms. In all other parts of the report, of course, people with "other" mother tongues are grouped with English-speaking people.

Data relating to chairmen of the board are listed only if these men are not also presidents. Of the 25 chairmen so designated, four are French-speaking, including two board chairmen of nominally English-speaking firms (one ECQ, one USQ).

The columns giving the breakdown by mother tongue of company presidents are more complete, and therefore more useful. Twelve of the 41 presidents listed (29 per cent) are French-speaking, including the presidents of two firms (one ECQ, one UKQ) where the language of ownership is English. There are no English-speaking presidents of FCQ firms. Of the two Canadian presidents of ForFrQ firms, one is English-speaking and the other is French-speaking. The remaining two are European.

It is not unexpected that the mother tongue of the two most senior officers of sample firms should be biased so heavily in the direction of the language of ownership. This is at least indirectly due to the criteria which we used for selecting and categorizing firms. Even so, our study has shown that it is possible, in at least a few cases, for a French Canadian to rise to the top of an English-speaking company. Conversely, the changes are very slight of an English

Table V.1  
Distribution of executive officers by mother tongue\*

Ownership-location group	Chairman**				President				Vice-presidents				Other officers			
	E		F		E		F		E		F		E		F	
	O	T	O	T	O	T	O	T	O	T	O	T	O	T	O	T
FCQ	-	1	-	1	-	7	-	7	1	12	-	13	-	34	-	34
ECQ	8	1	-	9	11	1	-	12	61	7	-	68	39	12	-	51
ECC	2	-	-	2	3	-	-	3	4	-	-	4	11	-	-	11
ForFrQ	-	1	2	3	1	3	-	4	3	1	2	6	6	10	-	16
UKQ	3	-	-	3	5	1	-	6	21	3	-	24	20	11	-	31
USQ	4	1	-	5	6	-	-	6	43	4	-	47	20	-	-	20
USC	2	-	-	2	3	-	-	3	15	-	-	15	13	-	-	13
Total	19	4	2	25	29	12	-	41	148	27	2	177	109	67	-	176

\*E: English; F: French; O: Other.

\*\*If not also president.

Canadian's being appointed president of a company where the language of the owner is French.

The proportion of French Canadians among vice-presidents, 15 per cent, is lower than it is among more senior officers. However, a larger proportion of French Canadian vice-presidents work for English-language firms. Whereas 10 out of 12 French Canadian presidents were accounted for by FCQ and ForFrQ firms, less than half (13 out of 27) of all French Canadian vice-presidents hold positions with firms in these two groups. The remaining 14 are with English-language firms, all of which have their head office in Quebec (seven ECQ, three UKQ, and four USQ). But in each of these three groups of firms they are outnumbered, by between seven to one and eleven to one, by English Canadians.

Representation of French Canadians among the top 10 executives of each firm is greatest (at 38 per cent) in the remaining group of other officers not specified above. This group includes such positions as secretary, treasurer and comptroller, as well as general managers just below the vice-presidential level. Of the 67 French Canadians holding these positions, 34 are with FCQ firms (where they have no English-speaking counterparts) and 10 are with ForFrQ firms. The remaining 23 are divided equally between ECQ (12) and UKQ (11) firms, where they account for between one-quarter and one-third of all officers at that level.

In summary, taking the 10 most senior officers together, for all firms, we note that 110 out of 419 men, or 26 per cent, are French Canadians, and that half of these, or 54 men, hold positions with FCQ firms. In addition, 21 out of 140 senior officers of ECQ firms (15 per cent) are French Canadian, while one out of 55 senior officers of FCQ firms (1.8 per cent) is English Canadian.

Information was also sought on the length of tenure of senior officers, with a view to determining whether there has been a trend in recent years towards increasing the representation of French Canadians in this group. The results are shown in Table V.2. In brief, it is difficult to discern a trend. The rate of appointment of all senior officers increased markedly in 1964, no doubt because of improving business conditions, but this increase applies to both English and French Canadians. We note a higher rate of increase for French Canadians in the five years since 1960, but the proportion of French Canadians appointed earlier than that is well above the proportion of English Canadians.

The two ownership-location groups exhibiting the most marked differences in trends are FCQ and ECQ. Details relating to these two ownership-location groups are shown at the bottom of Table V.2, for reference. In ECQ firms, nine out of 21 French Canadian senior officers were appointed in the most recent year, while almost as many (seven) have held their appointments for over six years. In FCQ firms, the only English Canadian among the senior officers was appointed some time before 1960.



Table V.2  
Length of tenure of executive officers

Mother tongue		Year of appointment						Not known	Total
		Prior to 1960	1960	1961	1962	1963	1964		
All firms									
English:	Number	83	24	26	40	38	52	42	305
	Per cent	27.2	7.9	8.5	13.1	12.5	17.1	13.7	100.0
French:	Number	43	4	6	12	12	24	9	110
	Per cent	39.1	3.6	5.5	10.9	10.9	21.8	8.2	100.0
Other:	Number	-	-	-	-	-	-	4	4
	Per cent	-	-	-	-	-	-	100.0	100.0
Total:	Number	126	28	32	52	50	76	55	419
	Per cent	30.1	6.7	7.6	12.4	12.0	18.1	13.1	100.0
ECQ firms									
English:	Number	1	-	-	-	-	-	-	1
	Per cent	100.0	-	-	-	-	-	-	100.0
French:	Number	24	4	2	8	5	6	5	54
	Per cent	44.4	7.4	3.7	14.8	9.3	11.1	9.3	100.0
Other:	Number	-	-	-	-	-	-	-	-
	Per cent	-	-	-	-	-	-	-	-
Total:	Number	25	4	2	8	5	6	5	55
	Per cent	45.5	7.3	3.6	14.5	9.1	10.9	9.1	100.0

Table V.2 (cont'd)

Mother tongue	Prior to 1960	Year of appointment					Not known	Total
		1960	1961	1962	1963	1964		
<i>ECQ firms</i>								
English: Number	26	7	15	12	16	23	20	119
Per cent	21.8	5.9	12.6	10.1	13.4	19.3	16.9	100.0
French: Number	7	-	-	-	2	9	3	21
Per cent	33.3	-	-	-	9.5	42.9	14.3	100.0
Other: Number	-	-	-	-	-	-	-	-
Per cent	-	-	-	-	-	-	-	-
Total: Number	33	7	15	12	18	32	23	140
Per cent	23.6	5.0	10.7	8.6	12.9	22.8	16.4	100.0

### *C. Directors*

In most companies, the board of directors must concern itself with the formulation or approval of corporate policies and with the company's image, as well as its financial status. This would include, in the current context, maintenance of a watching brief to ensure that the company remains aware of, and in step with, changing patterns of social attitudes and expectations in Quebec and the rest of Canada. We learned during our interviews, for example, that in a number of companies where the language of ownership is English, French Canadian directors are relied upon to keep their colleagues informed on general conditions of French Canada, and the reaction of French Canadians to company policies and practices. No doubt this role is undertaken in addition to, and not instead of, the normal functions of these men as directors, but it was mentioned to us specifically, in view of the nature of the present study.

In order to judge the possible effectiveness of these "interpreters of French Canada," as well as to test the degree to which French Canadians are represented in the directorships of large manufacturing firms in Canada, we have collected data on the mother tongue of directors of 42 companies in our sample. The results, broken down by ownership-location group and scope of operations of sample firms, are shown in Tables V.3 and V.4. Since some men hold directorships in more than one firm, the figures relate to the number of directorships, not the number of men, because at this stage attention is being focussed on the firms and not on individuals. Data on individuals, designed to show the extent to which the same men reappear on boards of various companies, is presented in subsequent tables. In total, our sample comprises 501 directorships, held by 453 men.

#### *1. Directorships*

As Table V.3 shows, 122 of 501 directorships, or 24 per cent, are held by French Canadians. The largest single number of these (56) is to be found in FCQ firms. A further 16 French-language directorships are in ForFrQ firms, but of these, seven are not held by French Canadians. The second largest number of French-language directorships (33) are in ECQ firms, where the proportion of French-speaking of the total is nearly one in five. This is about the same as the proportion of English-speaking directorships in FCQ firms (14 out of 70). The number of directorships held by French Canadians in USQ firms is 11, or one-eighth of the total. However, 28 of the 77 English-speaking directors are United States citizens, and if this number is subtracted from the English-speaking total, the ratio of French Canadians to English Canadians is once more about one in five.

Among regional firms, for which the French Canadian influence in the environment is relatively more important, the proportion of directorships held by French-speaking people is noticeably higher, at 39 per cent. For national firms, the proportion is 16.5 per cent. The effect of the scope of operations appears to have its greatest

Table V.3  
Distribution of directorships

Ownership-location	Mother tongue of men holding directorships			
	English	French	Other	Total
Regional firms				
FCQ	8	50	-	58
ECQ	51	8	-	59
ECC	-	-	-	-
ForFrQ	6	5	3	14
UKQ	14	1	-	15
USQ	24	4	-	28
USC	-	-	-	-
Total	103	68	3	174
National firms				
FCQ	6	6	-	12
ECQ	90	25	-	115
ECC	32	1	1	34
ForFrQ	8	11	5	24
UKQ	32	1	-	33
USQ	53	7	-	60
USC	46	3	-	49
Total	267	54	6	327
All firms				
FCQ	14	56	-	70
ECQ	141	33	-	174
ECC	32	1	1	34
ForFrQ	14	16	8	38
UKQ	46	2	-	48
USQ	77	11	-	88
USC	46	3	-	49
Total	370	122	9	501

influence on FCQ firms, among which the proportion of directorships held by English-speaking people rises from 14 per cent for regional firms to 50 per cent for national firms. Interestingly, the practice of ECQ firms is the opposite of what might be expected: the proportion of directorships held by French Canadians is higher in national firms (21.8 per cent) than in regional firms (13.6 per cent).

## 2. *Directors*

Turning now to an analysis of the 453 directors in the sample and an examination of the directorships they hold in firms of various ownership-location groups, we might investigate the extent to which multiple directorships link firms together. In particular, we might try to determine whether the proportion of directorships held by French Canadians is really less than it appears to be, because a relatively small number of French Canadians are each being counted several times over.

Table V.4 shows, in the two left-hand columns, the distribution of men by the number of directorships that they hold. The remaining columns (to the right) show the distribution of directorships by ownership-location group, and the totals of these columns correspond to the number of directorships indicated in Table V.3. It is possible, therefore, by reading up each column corresponding to a given ownership-location group, to determine how many of the directors sit only on the boards of sample companies of that ownership-location group, and how many sit on boards of one, two, three, or more, other sample companies, as well. The column on the extreme right, headed "other," shows directorships held in firms not in our sample. Separate tables are given for men whose mother tongue is English, French, or other.

Looking at the distributions corresponding to the number of directorships held by English- and French-speaking directors in the sample, we note that there is scarcely any difference between them. In both cases, just under half of all men hold only one directorship. (This would include "working boards," in which all directors are also executives of the company.) Among both French- and English-speaking directors, just over one-third hold five or more directorships. The proportion is very slightly higher among French Canadians.

There is therefore no evidence here of a tendency to elect the same small group of French Canadians to the boards of a number of companies, for "window-dressing" or any other purpose.

Patterns of behaviour in the election of directors do differ between ownership-location groups, however. Although, as noted above, English Canadians hold about the same proportion of directorships (one-fifth) in FCQ firms as do French Canadians in ECQ firms, multiple directorships occur more often in ECQ firms. Of the 14 English Canadians on the boards of FCQ firms, seven are directors of only those companies. Of the 33 French Canadians on the boards of ECQ



Table V.4  
Distribution of directors and multiple directorships (42 large firms)

Number of directorships held	Individuals		Per cent of total	Number of directorships held								
	Number	Per cent		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	Other	
English-speaking												
1	159	47.6		7	29	16	4	24	53	26	-	
2	19	5.7		1	7	1	-	3	3	4	19	
3	20	6.0		2	10	-	-	2	2	4	40	
4	21	6.3		2	11	-	-	4	3	2	62	
5 and over	115	34.4		2	84	15	10	13	16	10	1,167	
Total*	334	100.0	73.7	14	141	32	14	46	77	46	1,288	
French-speaking												
1	53	48.3		31	8	-	8	1	5	-	-	
2	5	4.5		4	-	-	1	-	-	-	5	
3	5	4.5		2	1	1	-	-	-	1	10	
4	4	3.6		3	-	-	1	-	-	-	12	
5 and over	43	39.1		16	24	-	6	1	6	2	449	
Total	110	100.0	24.3	56	33	1	16	2	11	3	476	

Table V.4 (cont'd)

Number of directorships held	Individuals		Per cent of total	Number of directorships held								
	Number	Per cent		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	Other	
Other												
1	9	100.0		-	-	1	8	-	-	-	-	-
2	-	-		-	-	-	-	-	-	-	-	-
3	-	-		-	-	-	-	-	-	-	-	-
4	-	-		-	-	-	-	-	-	-	-	-
5 and over	-	-		-	-	-	-	-	-	-	-	-
Total	9	100.0	2.0	-	-	1	8	-	-	-	-	-
Total												
1	221	48.8		38	37	17	20	25	58	26	-	-
2	24	5.3		5	7	1	1	3	3	4	24	24
3	25	5.5		4	11	1	-	2	2	5	50	50
4	25	5.5		5	11	-	1	4	3	2	74	74
5 and over	158	34.9		18	108	15	16	14	22	12	1,616	1,616
Total	453	100.0	100.0	70	174	34	38	48	88	49	1,764	1,764

\*All totals are for vertical columns only.

firms, 24 are also directors of at least four other companies. But this tells us more about the characteristics of ECQ firms than about the degree of representation of French Canadians, for the proportion of English Canadians holding multiple directorships is almost as high. In other ownership-location groups with head offices in Quebec (USQ, UKQ and ForFrQ), although the number of French Canadian directors is small, we note that about half of them hold single directorships only—the same proportion as English Canadians hold in FCQ firms. In ECC and USC firms, the number of French Canadian directors is smaller still and all cases involve multiple directorships. This is partly explained by the remoteness of the head offices of these firms from Quebec.

### A. *Introduction*

This chapter is devoted to a description and analysis of current conditions with respect to salaried employees in the sample firms. Chapter VII will deal with changes in these conditions. In both chapters our examination is carried out principally in terms of the relative use of the English and French languages in business, and the relative use of English- and French-speaking people.

This is the major point of that part of our project involving employment; and it specifically concerns salaried employees earning over \$5,000 per annum. The general pattern of *total* employment, as set out in Chapter III, is unquestionably of great importance in any consideration of the effects of business on society generally, and it is also useful to us here in providing a background against which we can look at the policies and practices of any firm or group of firms. Nevertheless, we have focussed attention on salaried employees for a number of reasons.

The first is that, to a large extent, wage-roll and junior clerical employees are drawn principally from the local labour market. Patterns of ethnicity and mother tongue of these people are thus more likely to reflect regional differences than differences in business practices. Higher-income salaried employees, on the other hand, are more mobile. It is much more likely that they will be hired on the basis of particular education, or technical or managerial skills which they may possess, than because they are available locally. Once hired, they are much more likely to be moved to different posts in various company locations.

Secondly, the particular policies and practices that a firm may pursue are to a large extent devised, developed and implemented by its managers. It is true that these people do not operate in a vacuum—the way in which they carry on the company's business is bound to

be affected (and properly so) by outside influences such as market conditions, government control and social institutions. But the way in which policy-makers perceive, interpret and react to these outside influences may reflect their ethnic background and mother tongue as well as their personality, experience and education, and this is part of what we have set out to examine. People working in middle management and supervision, or in technical or professional occupations, have a smaller part to play in the development of policy but they are responsible for its implementation, and to a great extent they determine practice. Also, these are the people who may eventually rise to senior management positions, and an examination of the characteristics of these groups may give us the basis for a forecast of how things may develop in future years.

Finally, supervisory, managerial and professional people often play a leading role in community life as well as in business. These are positions (and income levels) toward which young people, especially university students, aspire. If attention is to be focussed on language and ethnicity, it should be interesting to determine the characteristics of higher-income salaried staff, as a group, and how they may be changing.

Although we shall be looking separately at conditions within a number of higher salary groups, our decision to use \$5,000 per annum as the minimum cut-off point was prompted by two considerations: we did not wish to include *all* salaried employees (including junior clerical employees) in our sample, but rather all those whose jobs involve a degree of responsibility in either the supervisory or the professional sense; and we wanted to ensure that our sample included most recent university graduates. Our experience was that, in 1964-5, a \$5,000 salary minimum would satisfy both criteria.

Making use of the explanatory factors that we selected and developed for testing\* (such as ownership-location, product type, scope of operations, and so on), we shall attempt to measure patterns of representation of French Canadians and English Canadians (or, more precisely, all Canadians except those whose mother tongue is French). In addition, we shall measure the degree of bilingual ability required by each job as well as the language of business at each work location.

#### *B. The 36-Firm Sample*

The necessary data, which are representative of conditions existing in mid-1964, have been made available to us by 36 firms, representing all ownership-location categories. The *total* employment by these firms is some 73 per cent of the total employment by all 41 firms in the basic sample.

---

\*See p.12.



Using data collected in the special survey, *Earnings and Hours of Work in Manufacturing, 1964*, referred to in connection with Table II.3, estimates were made by region of the total number of people employed in manufacturing who earned over \$5,000 per annum. A comparison of sample data with this total is shown in Table VI.1. Reference to Table II.3 (which sets out total employment at all income levels and employment in the sample of 41 firms) shows that the 36-firm sample, although slightly smaller proportionately, is similar with respect to the percentage representation by region.

Table VI.1  
Employees earning \$5,000 per annum and over: Employment in sample firms compared with total employment in manufacturing

Region	Total employment	Sample (36 firms)	Sample as per cent of total
Quebec	61,300	11,955	19.5
Ontario	103,400	5,413	5.2
Total Quebec & Ontario	164,700	17,368	10.6
Canada	180,700	19,888	11.0

Source: Estimated from data given in D.B.S. 72-204, *Earnings and Hours of Work in Manufacturing, 1964*.

C. The Standard Chart

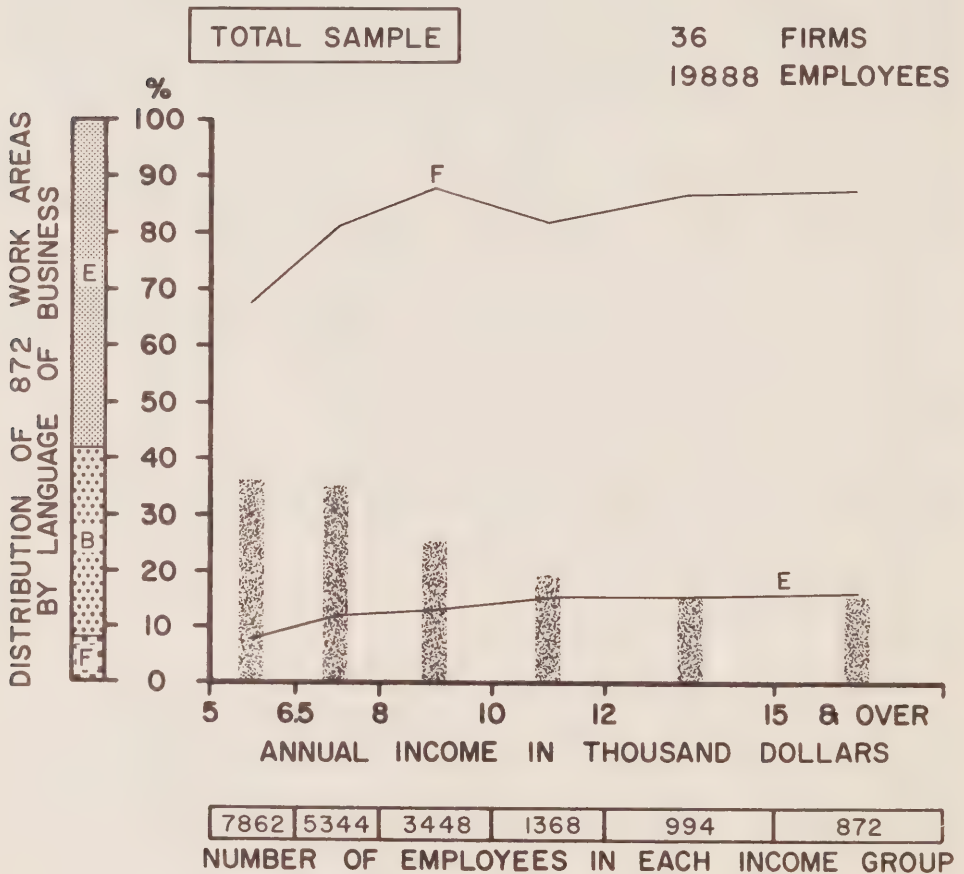
Because of the complexity of the tabular data collected, and because we wish to focus attention on trends and comparisons rather than absolute numbers, we have felt it preferable to present our findings in chart form (Figures VI.1-6, and VII.3-9). In these figures, a standard chart format is employed, and all distributions are expressed in percentage terms. The method of interpreting the first chart (Figure VI.1), discussed below, will therefore apply to all others.

D. Analysis of the Total Sample

Figure VI.1 shows results pertaining to the total sample. As shown in the legend at the top of the chart, this represents 36 firms employing 19,888 people earning over \$5,000 per annum. The notation "Total Sample" shown in the box at top left, indicates that both national and regional firms are included here. Whenever either of these categories is being considered separately, indication will be given. The other dimensions of analysis, such as ownership-location group, location of operations or operating function, will also be identified, where applicable, in the box on the chart. If these are

Figure VI.1

Characteristics of salaried employees earning over \$5,000 per annum: Basic chart



1. Column chart shows percentage of French-speaking employees in each income group.
2. Single lines show percentages of French-speaking (F) and English-speaking (E) employees whose jobs require bilingual ability, by income group.
3. Bar chart at left shows distribution of work areas by language used in business. "F" indicates French only, "E" indicates English only, and "B" indicates that both languages are used.

not specified, it should be assumed that the chart relates to all ownership-location groups, or all locations, or all functional areas.

### 1. *Distribution of employees by income and mother tongue*

The narrow bar chart at the left relates to the distribution of work areas by language of business, and will be discussed fully later. The main column chart is labelled to show the percentage of French-speaking employees in each of the following annual income groups:

\$5,000 to 6,499	(\$1,500 increment)
\$6,500 to 7,999	(\$1,500 increment)
\$8,000 to 9,999	(\$2,000 increment)
\$10,000 to 11,999	(\$2,000 increment)
\$12,000 to 14,999	(\$3,000 increment)
\$15,000 and over.	

The total number of employees in each income group is shown in the appropriate box at the bottom of the chart (one box for each salary group). This is the only indication given of the distribution of total employment by income in numerical terms. This distribution is not charted.

The stippled columns show how the percentage of French Canadians in total employment varies by income group.

In reading this chart for total employment, therefore, we would see first (from the figures at the bottom of the chart) the way in which the total number of employees in the sample (19,888) is distributed by income group. The percentage of employees whose mother tongue is French *within* this distribution is given by the column chart. Thus, of 7,862 people earning between \$5,000 and \$6,500 per annum, 36 per cent (or 2,830 people) have French as their mother tongue. Similarly, of the 872 people earning over \$15,000 per annum, 14.6 per cent (or 127 people) have French as their mother tongue (percentage figures are rounded to the nearest full number for plotting). Classification of employees as French-speaking or English-speaking was done by appropriate officers of responding firms on the basis of "mother tongue or language of greatest fluency, if mother tongue is neither French nor English." The term "income," as used here, includes annual salary plus regular bonuses and commissions.

### 2. *Bilingual requirements on French- and English-speaking employees*

The two single lines superimposed on the column chart show the bilingual requirement on French-speaking and English-speaking employees in each income group. Again, determination of the bilingual requirement was made by the firms themselves in answer to the question, "What is the percentage of employees in each (income level-mother tongue) group for whom bilingualism is an essential job requirement?" Note that it is not bilingual *ability* that is being measured here (evaluation of this would be, we believe, too subjective and could vary considerably between firms or even within any given firm

depending on what criteria any particular evaluator might have in mind), but bilingualism as part of a *job specification*. Admittedly, the criterion which we selected is not completely objective, but it does have the merit of focussing attention on the firm's practices first, and then on the requirements which the job makes on the individual, rather than the other way around. It should be kept in mind, however, that job specifications are seldom so rigid that they do not change slightly to reflect the abilities (and disabilities) of the individuals who carry out those jobs.

In reading Figure VI.1, we see that, in the lowest income group, the bilingual requirement on French-speaking employees is 68 per cent. This means that, of those employees in this group, whose mother tongue is French (2,830, as noted above), 68 per cent, or 1,924 people, must be bilingual in order to fulfil the requirements of their jobs. We refer to this as "the bilingual requirement on French Canadians." In the same income group, the similarly-defined "bilingual requirement on English Canadians" is 8 per cent; it affects 403 people whose mother tongue or language of greatest fluency is English.

### 3. *The language of business in each work area*

The narrow bar chart at the left gives a rough measure of the "language of business." It will be seen from the questionnaire (see Appendix) that in Question 2.1.2 (the source of all the data used here) firms were asked to give information broken down by functional area within each geographic region. Against each "regional-function" cell, provision was made for showing what language or languages are used in the transaction of business. What we have defined as a "work area," therefore, involves both function and location. Thus, a firm with its head office in Montreal might operate eight work areas in that region, corresponding to the eight functional areas designated on the questionnaire. If it also operates a manufacturing plant and a sales office in Toronto, the total number of work areas would be 10. If the firm has a sales office in Fort William as well as in Toronto, however, the number of work areas would still be 10, because both sales offices are in the same designated region. Also, a manufacturing plant employing a thousand people and a branch sales office employing five would each count as one work area. Our measure is therefore a very rough one, indeed.

The total number of work areas (872) is shown beside the bar chart, while the bar itself indicates that in about 7.5 per cent of these (64 work areas), the language of business is French, and in about 58.5 per cent (509 work areas), the language of business is English. In the remaining 34 per cent (299 work areas), both languages are used. In all charts, the percentages, reading from the bottom up, apply to French, bilingual and English, in that order.



#### 4. Interpretation

The interpretation of these data depends to a large extent on the purposes (and predisposition) of the reader. The answer to the obvious question, "Are French Canadians under-represented in higher positions in industry?" cannot be given unequivocally, although we do note that the percentage of French Canadians is low and that it falls as salary level increases.

Much of this report is devoted to examining whether there are factors operating within the system which prevent French Canadians from reaching the upper levels of management, but we have seen that there are external factors at work as well, and there seems to be some evidence of their effect in our charts. The status of the businessman in French Canadian society is changing and social pressures did, in the past, discourage French Canadians from entering larger business firms at all. (We should, therefore, look for "over-representation" in other professions, such as law, the clergy and the Quebec civil service, to test the effect of these pressures.)

In seeking to determine why the percentage representation of French Canadians falls off as income (and presumably, level of managerial responsibility) increases, we can consider two sets of factors, one external and one internal, although we cannot say what the relative importance of each may be. Considering the effect of external factors, we would note that, on the whole, managerial staff at the upper salary levels have been working for a longer time, and the make-up of this group reflects the attitudes of French and English Canadians 10, 20 or 30 years ago towards working in large firms. We would thus expect that, over future years, the whole curve would shift across the chart from left to right, bringing about a corresponding increase in the percentage of French Canadians in upper-income groups as people now working in more junior positions are promoted through the ranks. Continuing changes in social attitudes, as far as they affect the rate at which younger people enter industry, should also increase the percentage of French Canadians in the lower-income groups. Our study of hiring practices (Chapter VII) will test this hypothesis.

Among the most important factors operating *inside* the system are those relating to educational requirements imposed on professional and supervisory staff by changing technology. Dr. D. E. Armstrong's study<sup>1</sup> examines this aspect, and it attempts to determine whether, given the same educational qualifications, there remains a difference in the "success patterns" of French and English Canadians. Any difference could be a function of bilingual ability, resistance to mobility, or prejudice. In short, Dr. Armstrong found no significant difference one way or the other, although his study also indicates that, at upper educational levels, French Canadians are likely to have considerable bilingual ability in any case.

Beyond these overall effects, we are looking for differences in policies and practices that may be due to ownership-location patterns, function and similar "internal" factors. For these purposes,



therefore, we are on safest ground in treating the data shown in Figure VI.1 as the norm and concentrating our attention on differences between any specific case and the overall average.

To facilitate a comparison of particular cases (shown in subsequent charts) with the overall average, the chart of Figure VI.1 will be repeated and shown alongside similar charts relating to particular variations in our explanatory factors. Many differences can thus be seen at a glance.

In summary, we do note that, on the whole, the bilingual requirement on French Canadians is significantly higher than on English Canadians, and that the requirement rises with income level in both cases. We see also that English is used as the sole language of business in just over half of all work areas while the exclusive use of French is restricted to a very small percentage of cases.

#### *E. Differences Due to Ownership-Location Group*

Figure VI.2, which comprises eight charts similar in form (but reduced in size) to that of Figure VI.1, shows differences due to ownership-location group. Each of the smaller charts relates to all salaried persons earning \$5,000 per annum or more, in all regions and in all functions, employed by all firms in each ownership-location group. The number of firms in each group is shown at the bottom of the appropriate chart, and each chart is identified by the code description in the box at top left. (The code description is explained in Table II.1, page 15.)

##### *1. FCQ firms*

The proportion of French Canadians employed by firms owned by French Canadians and based in Quebec is considerably higher than the overall average (shown in the chart marked "Total Sample") at all income levels. An interesting feature here, however, is the fact that the curve is U-shaped. In the income levels up to \$12,000 per annum, the curve drops at a faster rate than average to the point where, for employees earning between \$10,000 and \$12,000 per annum, the proportion of English-speaking is more than half (54 per cent). These "middle management" positions often demand educational and technical qualifications which create staffing problems because there is a shortage of French Canadians with the necessary qualifications. However, of the 33 English-speaking Canadians represented here, all but two are employed outside of the province of Quebec principally in Ontario and the Atlantic provinces. Of the 19 English-speaking Canadians earning over \$12,000 per annum, more than half (11) are employed in Quebec.

These patterns are reflected in the bilingual requirements imposed on English-speaking Canadians. For the four lower income groups, the requirement is much lower than the average. Of the 127 English-

speaking Canadians represented in these four groups, all but seven work outside of the province of Quebec, principally in sales. The English Canadians earning more than \$12,000 a year either work in Quebec or, presumably, must report back to head office in Quebec on the operations they manage, and the bilingual requirement on them is correspondingly greater.

The bilingual requirement on French Canadians is much less than average for lower income groups, reflecting the higher-than-average proportion of work areas where the language of business is French. For higher income groups, however, the bilingual requirement is significantly higher than average. This is no doubt due to environmental factors, chiefly other business firms in the rest of Canada and in the United States where the usual language of communication is English. The very high bilingual requirement imposed by French Canadian-owned firms on their own top executives may be taken as an indication that a unilingual French Canadian is unlikely to obtain a top management position in any company in North America—even in a regional firm operating in Quebec and owned by French Canadians.

The 15 work areas where the language of business is English are all sales or marketing operations, and they are all outside the province of Quebec.

## 2. *ECQ firms*

Because of the preponderance of firms belonging to this ownership-location group in the total sample—and, indeed, in manufacturing in Quebec—the characteristics of the overall average are bound to be weighted in the direction of the characteristics of this group.

The proportion of French Canadians is higher than the average in the three lowest income groups, almost exactly equal to average for the two middle management groups, and somewhat below average (12 per cent versus 15 per cent) for people earning \$15,000 and over per annum.

The bilingual requirements on both French- and English-speaking employees are higher than average, but the requirements on French-speaking employees are much greater than on their English-speaking counterparts.

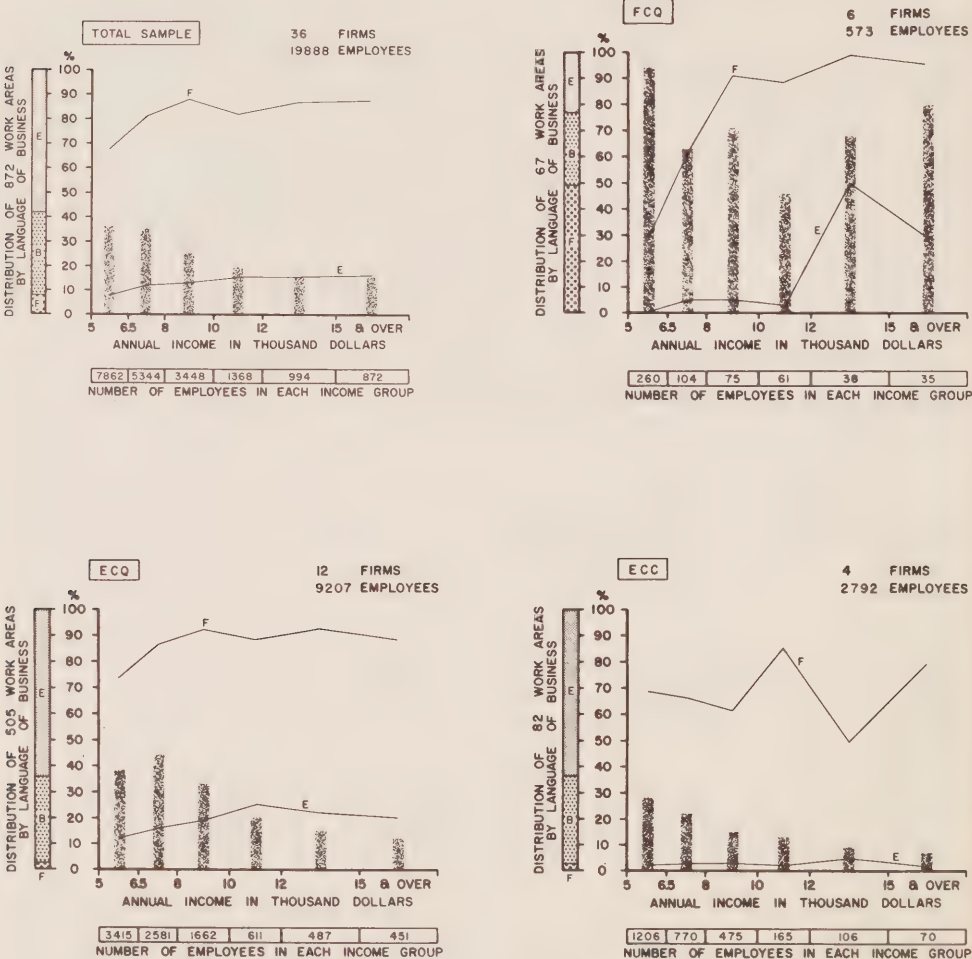
A relatively small number of work areas (13) are unilingual French. Of these, two are in the Montreal region and 11 are elsewhere in Quebec. Of the 169 bilingual work areas, all but seven are in Quebec (98 in Montreal and 64 elsewhere in the province). The seven are distributed: three in Ontario, three in the Atlantic provinces, and one in the Western provinces.

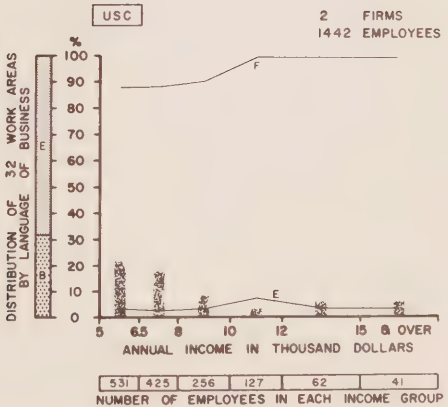
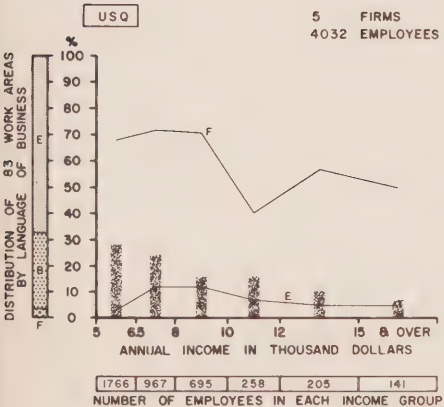
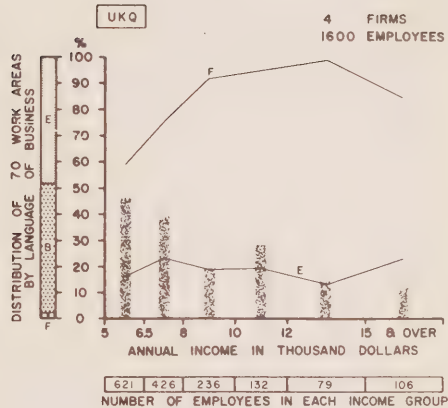
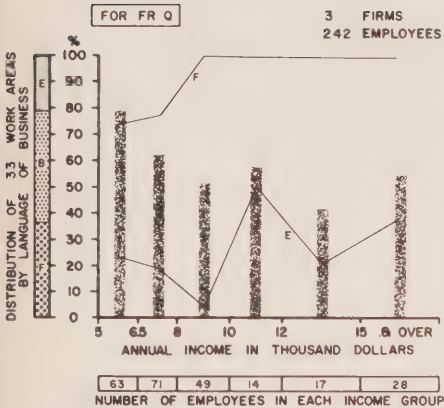
## 3. *ECC Firms*

The proportion of French Canadians earning over \$5,000 per annum in these firms is lower than average in all income groups, and the

Figure VI.2

Characteristics of salaried employees earning over \$5,000 per annum: Differences due to ownership-location





percentage declines with increasing income at a faster rate (from about 80 to about 50 per cent of average). These figures are, of course, biased by the fact that firms in this group have their head offices outside Quebec, and that they employ a relatively greater proportion of people outside this province. A more balanced comparison would be given by considering employment in Quebec only. If we were to do this, we would find that the percentage of French-speaking salaried employees in this group of firms runs from 82 to 50 per cent of total as salary increases. These levels are more than twice as high as the average.

Looking again at total employment by ECC firms in all regions, we find that the bilingual requirement on both French- and English-speaking employees is lower than average. For English-speaking employees, it is very much lower (between 2 and 5 per cent compared with the average of about 13 per cent). The percentage figure fluctuates considerably for French-speaking employees, mainly because of the small number of people in this part of the sample.

Most work areas are unilingual English, although these are all located outside Quebec. Both of the unilingual-French work areas are in Quebec, as are 26 of the 28 bilingual work areas. The remaining two are in Ontario and the Atlantic provinces.

#### 4. *ForFrQ firms*

Since the total number of employees in this group of firms is small, our analysis cannot be too detailed. We do note, however, that the percentage of French-speaking employees is generally well above average, as was the case with FCQ firms. The downward trend as income increases is once more apparent, and there is a suggestion of a U-shaped curve. Because of the small average size of these firms and their subsidiary relationship with parent firms in Europe, the link between ownership and management may be quite direct and some French-speaking employees (particularly in the upper-income groups) are probably not French Canadian.

One of the most noteworthy features of this chart is the high bilingual requirement on French-speaking employees (100 per cent in all but the two lowest income groups). This reflects the practices of the European parent companies, as well as local conditions. The bilingual requirement on English-speaking employees is also well above average. It can be seen, despite the fluctuations, that the trend rises with income.

All the unilingual French and all but one of the bilingual work areas are located in Quebec. Only one of the seven unilingual-English work areas is located in Quebec, in the Montreal region.

#### 5. *UKQ firms*

Firms in this group are owned by British interests, and have their offices in Quebec. The percentage of French-speaking employees is



slightly greater than average in the four lower income groups and about equal to (or very slightly less than) average in the two upper groups.

These firms are somewhat larger than those included in the ForFrQ group, and representation of British subjects is quite small, even in senior management.

The bilingual requirement on both French- and English-speaking employees is close to average. At lower income levels, the requirement is slightly less for French-speaking employees and slightly greater for English-speaking employees. At higher income levels, the bilingual requirement on French-speaking employees is somewhat higher than average.

Just under half of all work areas (34 out of 70) are unilingual English. Of these, 17 are outside Quebec. The single unilingual-French work area, and all but one of the 35 bilingual work areas, are in this province.

#### 6. *USQ firms*

The proportion of French-speaking employees in these firms is lower than average for all income groups, declining with increasing income from about 80 to about 50 per cent of average. This is very nearly the same trend as in ECC firms, although it is well below the average for ECQ firms, which compare more directly from the point of view of regional distribution of employment.

The bilingual requirement on both French- and English-speaking employees is well below average for all but the lower income groups.

In about two-thirds of all work areas (56 out of 83), the language of business is English. Of these, 24 are located in Montreal (mainly in the finance, engineering, and "other"—including general management—functions). The remaining English-language work areas are located outside Quebec. All three unilingual-French and 24 bilingual work areas are in the province of Quebec.

In view of the dominance of English as the language of business in this group of firms, the low bilingual requirement on French-speaking employees appears to be unusual. Much of the downward bias is contributed by figures relating to the engineering and research and development functions, where six out of the seven work areas are unilingual English and the other one is bilingual. The answer possibly lies in the definition of bilingualism as a job requirement and not as a personal achievement. Strictly speaking, in these jobs, a French Canadian does not have to be *bilingual*, as long as he speaks English.

We have specifically mentioned engineering and research and development because these functions typify and determine the characteristics of this group of firms more than any other. In general, American-owned firms (USQ and USC) are highly technically-oriented. They tend

to draw their employees from countries all over the world on the basis of technical and educational qualifications, and they tend to move them quite frequently from one company location to another. At levels above wage-roll and junior clerical staff, hiring practices of these companies are only very slightly affected by local conditions; the emphasis is on technology. Thus, although the majority of employees are not French-speaking, a significant proportion of these would neither be Canadian by birth, nor necessarily have English as their mother tongue. What does bring these people together is the ability to use the technological know-how possessed by the company, and this usually has its source in the United States. Even more often, this technological know-how is developed and communicated in the English language.

#### 7. *USC firms*

The comments pertaining to USQ firms apply equally well to USC firms. In this case, however, the fact that the head offices are not located in Quebec means that the regional distribution of employment is less biased toward Quebec, and this reinforces the tendency to have a low proportion of French-speaking employees. At all income levels, the proportion is well below average.

For similar reasons, the bilingual requirement on English-speaking employees is much less than average. The bilingual requirement on French-speaking employees, however, is significantly above average (100 per cent in the three upper salary groups). This is a reflection of the liaison requirements between operations in Quebec and general management elsewhere.

There are no unilingual-French work areas. Of the 10 bilingual work areas, three are in the Montreal region and seven are located elsewhere in Quebec province. The 22 unilingual-English work areas are all outside Quebec except for six (evenly dispersed among all functional areas) in the Montreal region.

#### *F. Differences Due to Scope of Operations*

Firms in the sample have been divided into two large categories, "regional" and "national," for the purpose of examining whether the geographic scope of their operations gives rise to any differences in policies and practices. As noted earlier, "regional" firms are those which have all their operations, except for branch sales offices, in the province of Quebec and adjoining areas where bilingual-bicultural conditions are encountered. "National" firms also have substantial operations in these areas, but they employ a significant number of people in other parts of Canada as well.

Figure VI.3, which employs the format of the previous charts, shows average conditions in the 15 regional and 21 national firms. Each of these charts is accompanied by three more detailed charts

showing regional and national comparisons in each of the ECQ, UKQ and USQ ownership-location groups. Other ownership-location groups either do not comprise both regional and national firms, or else do not have a sufficient number of firms in each category to permit plotting.

### *1. National and regional firms*

The characteristics of national firms differ very little from the overall average (shown on Figure VI.1), owing principally to the predominance of national firms in the total sample noted earlier. The main differences occur in the representation of French Canadians in the lowest and highest income groups. In both cases, the percentage is somewhat lower than average. Bilingual requirements on both French- and English-speaking employees are substantially the same in both samples. The percentage of unilingual-French work areas is about half as great as in the total sample (3.7 versus 7.3 per cent) and the percentage of bilingual work areas is almost the same (32.1 and 34.3 per cent).

The regional category is substantially smaller than the national category since it comprises fewer firms, and the average size of each firm is smaller. Regional firms account for about 23 per cent of all people earning over \$5,000 per annum in the total sample of 36 firms. Representation of FCQ and ForFrQ firms is proportionately greater here than in the national category.

These factors are bound to introduce a bias into the characteristics of the total regional sample, but they are not exogenous variables. In fact, they themselves constitute important characteristics.

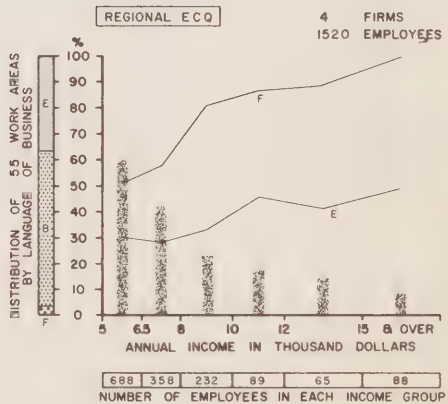
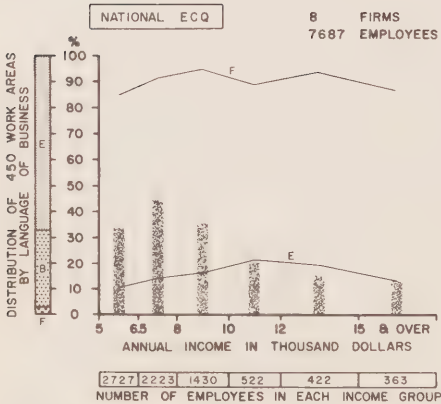
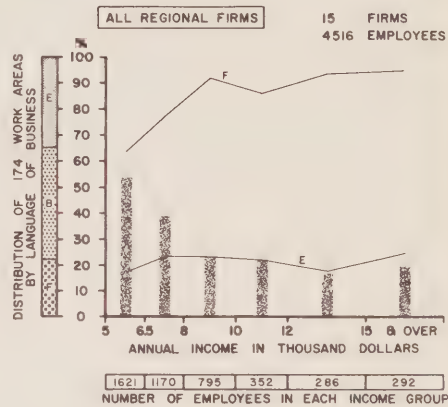
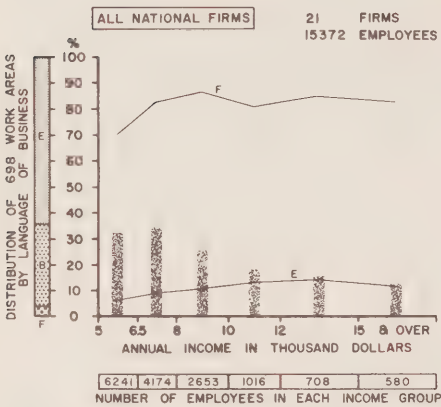
The percentage of French-speaking employees in regional firms is generally higher than the average (shown on Figure VI.1) in all income groups except one (\$8,000 to \$10,000 per annum). Apart from the lowest income group, however, the difference is not too significant.

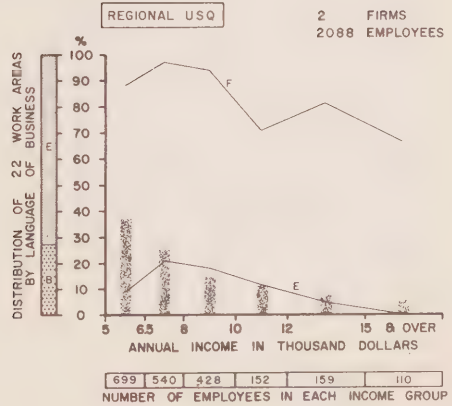
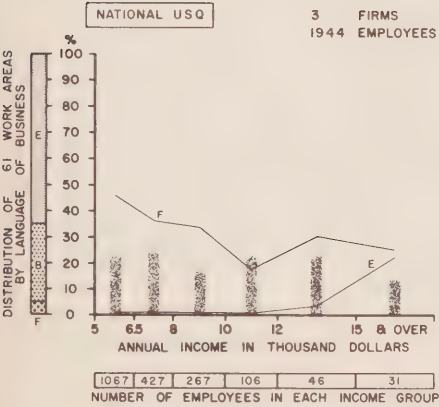
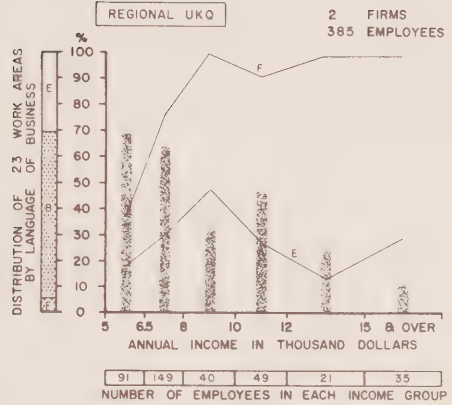
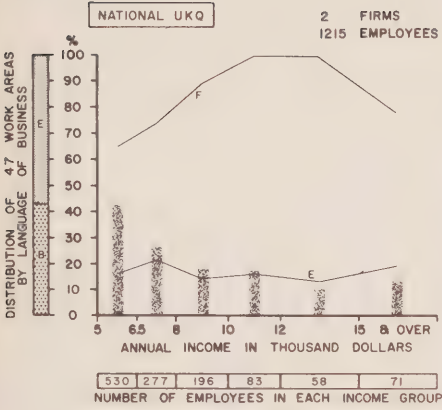
The bilingual requirement on English-speaking employees in all income groups is substantially higher in regional firms than in national firms. Interestingly enough, it is also higher for French-speaking employees of regional firms in all but the two lowest income groups. This is partly because of the influence of FCQ and ForFrQ firms in the regional category. As noted earlier, the bilingual requirement on senior French-speaking employees of firms in these two groups is significantly higher than average.

The most noticeable difference is in the percentage of bilingual and unilingual-French work areas. Although this is partly explained by the relatively greater representation in this category of FCQ and ForFrQ firms, the pattern is repeated in other ownership-location groups as well.

The six more detailed charts in Figure VI.3 compare the characteristics of regional and national firms in the ECQ, UKQ and USQ

Figure VI.3  
Characteristics of salaried employees earning over \$5,000 per annum: Differences due to scope of operations







ownership-location groups. FCQ and ForFrQ firms are not charted because of their small representation in the national category, while ECC and USC firms do not, by definition, occur in the regional category.

In Chapter III we examined total employment at all income levels and concluded that regional firms do tend to employ a greater proportion of French Canadians than national firms, even when operations in the province of Quebec alone are compared. The present analysis shows that this conclusion does not always apply to salaried staff earning over \$5,000 per annum, if we look at specific ownership-location categories.

## 2. *ECQ firms*

In ECQ firms, the percentage representation of French Canadians is greater in national than in regional firms in all income groups except the lowest. This is the opposite of what might have been expected. The significance of this is accentuated by the fact that ECQ firms account for over 46 per cent of total salaried employment.

For this group of firms, the effect of scope of operations seems to be more evident in the bilingualism requirements. For national firms, the bilingual requirements on French-speaking employees are generally higher than for regional firms and they do not fall off at lower income levels.

In regional ECQ firms, as in FCQ firms, a French-speaking employee requires less bilingual ability to get started, but he meets increasingly stringent requirements as he progresses to higher levels of income and responsibility. Usually, advancement brings with it a greater number of contacts outside the firm. To a lesser extent, the same may be said of the English-speaking employee of the regional ECQ firm, except that the bilingual requirements of regional firms are greater than those of national firms at all income levels.

The percentage of unilingual-English work areas is much higher in national firms than in regional firms (67 and 36 per cent respectively), owing to the greater number of operations outside Quebec. The percentage of bilingual work areas is much lower in national firms (30 per cent versus 60 per cent for regional firms) while the percentage of unilingual-French work areas, low in both categories, is about the same (2.5 and 3.6 per cent).

## 3. *UKQ firms*

The percentage of French Canadians in national UKQ firms is lower than in regional UKQ firms in all but the highest income group. Here again, operating nationally seems to affect chiefly the bilingual requirements on both French- and English-speaking employees. For national firms, the bilingual requirement on French-speaking employees starts at a higher level and rises less steeply with income than for regional firms. The bilingual requirement on English-speaking

employees in national firms is lower than in regional firms, and it remains fairly constant for employees at all income levels, as was the case with national ECQ firms.

Although there is only one unilingual-French work area among the regional UKQ firms (located in Quebec outside Montreal), the proportion of bilingual work areas is significantly greater than among the national firms (65 versus 43 per cent).

#### 4. *USQ firms*

The situation here is similar to that in ECQ firms: the percentage representation of French Canadians is *lower* in regional USQ firms than in national USQ firms in all but the two lowest income groups. This is so despite regional demographic factors which would tend to encourage the employment of a proportionately greater number of French Canadian people in Quebec, where the greatest concentration of the regional firms' operations is located.

The bilingual requirements of USQ firms on both French- and English-speaking employees are strikingly different between regional and national firms and (as we have seen earlier) between this group and the overall average. In regional USQ firms, the bilingual requirements on both English- and French-speaking employees are higher than average, reflecting the importance of communication *within* the firm (including communication with wage-roll employees). With rising income, the requirement on English-speaking employees drops to less than average and then to zero. It also drops for French-speaking employees, one of the few instances where it does.

#### G. *Differences Due to Location of Operations*

The extent to which local patterns of ethnicity and mother tongue affect the characteristics of salaried staff is examined in Figure VI.4. Here, all salaried employees (over \$5,000 per annum) in all sample firms are examined by region: Montreal, Quebec outside of Montreal, Ontario, the four Atlantic provinces, and the four Western provinces.

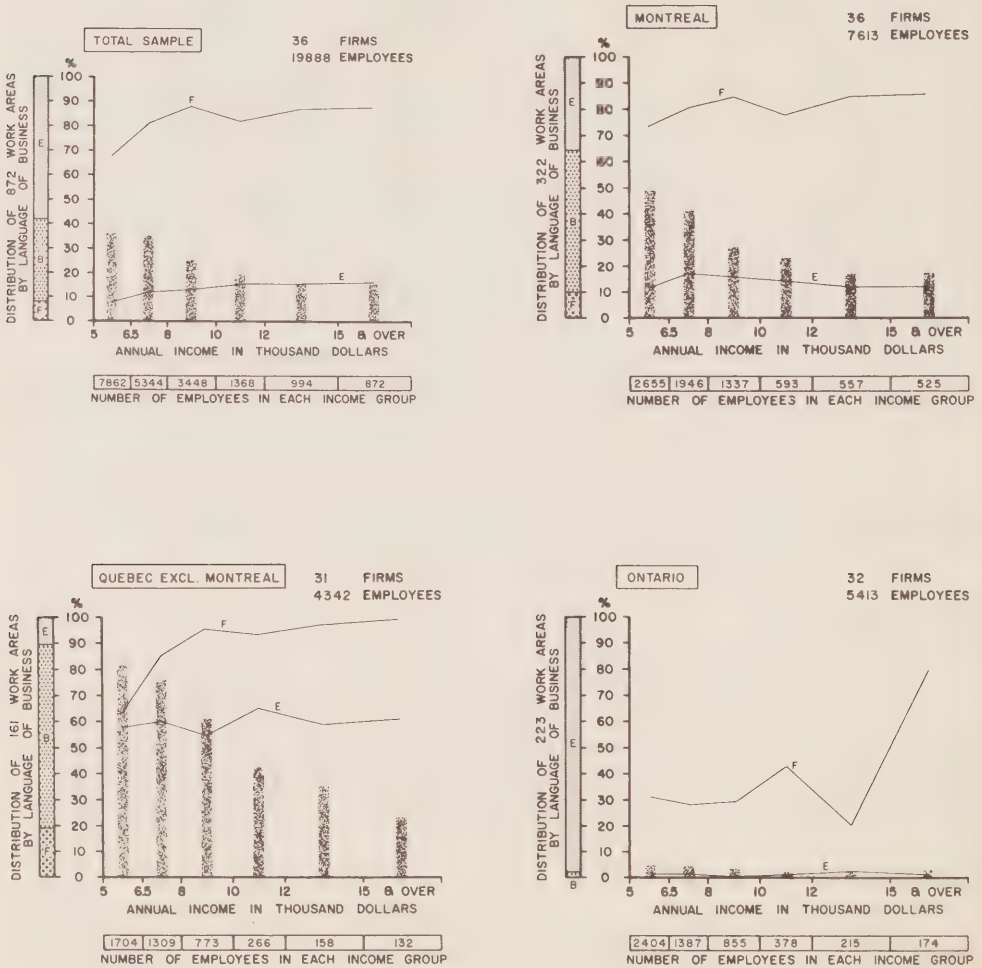
##### 1. *Montreal region*

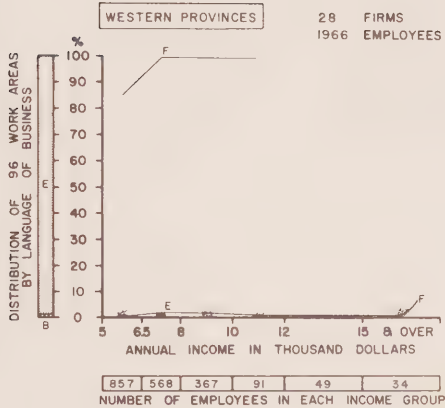
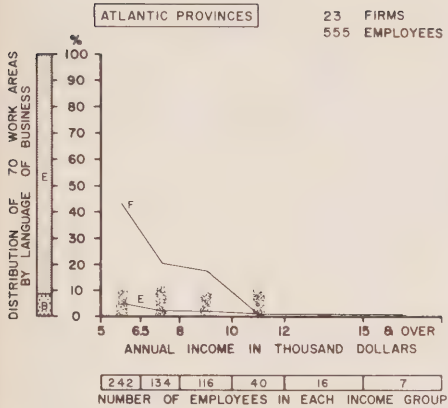
As noted earlier, the metropolitan Montreal region has been considered separately from the rest of Quebec province because of the relatively greater proportion of English-speaking people there, and also because of the role played by Montreal in national commerce and industry. Chief executives of almost all firms with head offices in Montreal made it clear to us, in our interviews with them, that the latter is the chief reason why their companies are based in this city.

The percentage of French Canadians employed in Montreal is only slightly greater than the overall average (as shown in the chart

Figure VI.4

Characteristics of salaried employees earning over \$5,000 per annum: Differences due to location of operations





marked "Total Sample") in all income groups. The difference is more pronounced at the four lower income levels.

Similarly, the bilingual requirements on both French- and English-speaking employees is close to the average. For both groups of employees, the requirement is higher than average at lower income levels and less than average at higher income levels.

The greatest proportion of work areas (54.4 per cent) is bilingual. The percentage of unilingual-French work areas is greater than the overall average (10.2 versus 7.3 per cent), while the percentage of unilingual-English work areas, although less than average, is still significantly high at 35.4 per cent. These are distributed quite uniformly in all functional areas.

Differences within the Montreal region due to ownership-location group follow the same pattern outlined earlier for the sample as a whole. These conditions, which are not charted, are discussed below.

Within FCQ firms, 167 out of 176 employees in the Montreal region earning \$5,000 or more per annum are French-speaking. Of the remaining nine English-speaking employees, seven are engaged in manufacturing, where the bilingual requirement on them is relatively low considering their work environment (most of their contacts are likely to be with French-speaking employees), and two are in engineering, and research and development, where none is required to speak French.

ForFrQ firms employ a proportionately greater number of English-speaking people in the Montreal region (54 out of 192) than do FCQ firms. Most of these people, however, (34) are in marketing. Eight are in engineering, where total employment is 26, and seven are in other functions, where total employment is 11.

The percentage of French Canadians employed in the Montreal region is significantly higher in ECC firms than in ECQ firms at all income levels. The same relationship is observable in the case of USC and USQ firms. For both pairs, the relationship is also reflected in the bilingual requirements on both French- and English-speaking employees. These differences are partly explained by the fact that head office employees of ECC and USC firms (nearly all of whom are English-speaking) are naturally not included in the figures for the Montreal region. All groups of firms except UKQ, USQ and USC have unilingual-French work areas in the Montreal region. Unilingual-English work areas are operated by all except FCQ and ECC firms (among the ForFrQ firms one has a unilingual-English work area). All firms have bilingual work areas.

## *2. Quebec excluding Montreal*

Reflecting regional patterns of ethnicity and mother tongue, the percentage of French Canadians is well above average in all income groups, ranging from 2.3 times average at the lower end to 1.5 times average at the upper end of the income scale. As indicated, the



proportion drops more sharply with increasing income level than in the overall sample.

The bilingual requirement on French-speaking employees is significantly above average in all but the lowest income group, rising to 100 per cent for people earning over \$15,000 per annum. The requirements imposed by the need to communicate outside the firm and outside the region are strikingly evident here. The requirement that more English-speaking employees be bilingual is also very interesting. Ranging between 55 and 65 per cent, it is much higher here than on any chart so far examined. In this case, more English-speaking employees need to communicate with other people (principally French-speaking clerical and wage-roll employees) *within* the firm. It is also of interest to note, however, that the requirement is still below that imposed on French-speaking employees.

The percentage of unilingual-French work areas is greater than unilingual-English (19.2 per cent compared to 10.6 per cent), but bilingualism is dominant (70.2 per cent of all work areas).

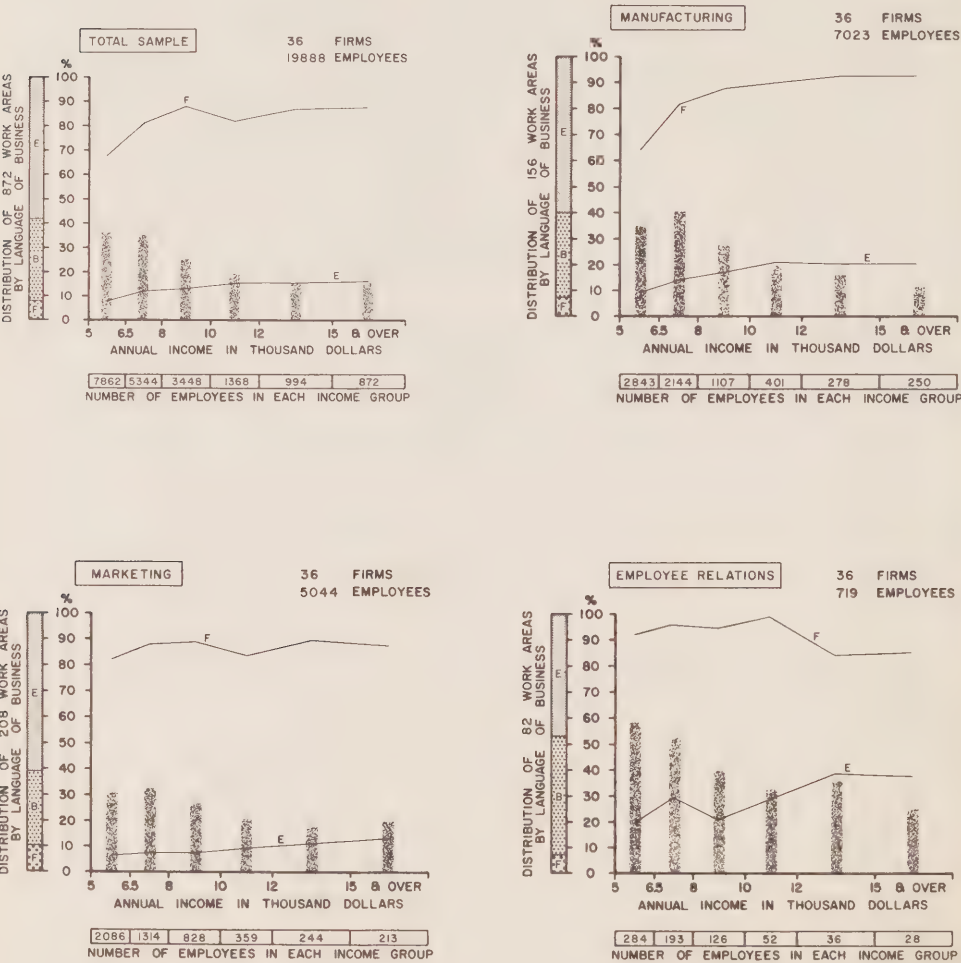
For some ownership-location groups, such as ForFrQ, USQ and USC, the number of employees in the sample is so small that detailed analysis is not possible. However, general trends are evident. These are not charted, but can be discussed. (1) FCQ firms employ nine English Canadians in Quebec outside Montreal, all at incomes above \$8,000 per annum. Of these, four are in manufacturing, three in marketing and two in finance and accounting. ForFrQ firms employ no English Canadians in this region. (2) ECQ and ECC firms repeat the pattern observed in the Montreal region. (3) All ownership-location groups except USC firms operate unilingual-French work areas. Unilingual-English work areas are operated by ECQ and UKQ firms, and these involve most functions. (4) Of the 30 French Canadians earning over \$15,000 per annum in this region, three are employed by FCQ firms, none by ForFrQ firms, 19 by ECQ firms, six by UKQ firms, and one each by USC and ECC firms.

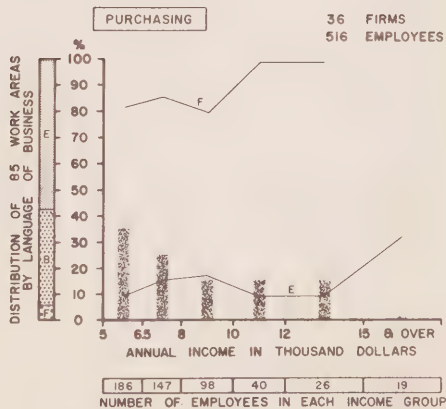
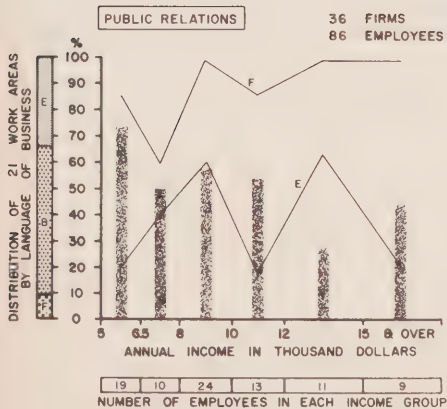
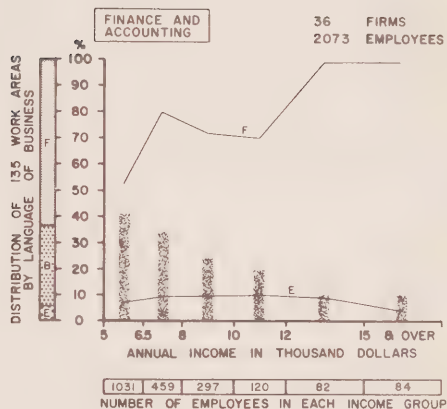
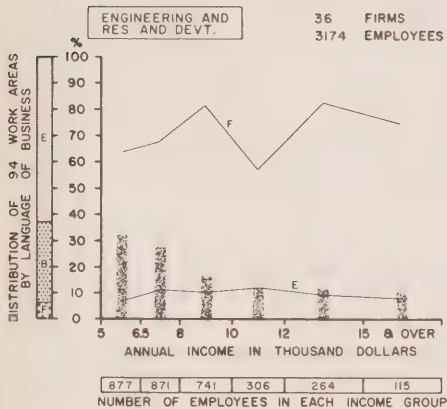
### 3. *Ontario, Atlantic provinces, and Western provinces*

There is a sufficient number of employees in each sample to let us see general trends. The percentage of French Canadians is quite low in all three cases although, interestingly, there appears to be no decline in the percentage as income level increases (see the charts for Ontario and the West, especially).

Only a small percentage of English-speaking employees in all three regions are required to be bilingual—from zero to five per cent. The proportion of French-speaking employees in Ontario who must be bilingual rises from a relatively low level (about 30 per cent) to a maximum of 80 per cent as salary increases. In the Atlantic provinces, it drops sharply from 44 per cent to zero, and in the Western provinces bilingualism seems to be significant only for people in the lower income groups. The language of business is dominantly English

Figure VI.5  
Characteristics of salaried employees earning over \$5,000 per annum: Differences due to functional area





in all three regions. There are six bilingual work areas in the Atlantic provinces, four in Ontario and one in the Western provinces.

#### *H. Differences Due to Functional Area*

In Figure VI.5, differences that might be due to the requirements of work in each functional area are examined. The chart in the top left corner (which repeats Figure VI.1) shows average conditions in the sample as a whole; it is included for reference, while the other seven charts pertain to salaried employment by all sample firms in each of the seven designated functional areas. These are: manufacturing, marketing, employee relations, engineering and research and development, finance and accounting, public relations, and purchasing.

##### *1. Manufacturing*

The functional area employing the greatest number of salaried people earning over \$5,000 per annum is manufacturing. Here we would expect that, at least with regard to bilingual ability and the language of business, the chief factors influencing practice would be the language characteristics of the local labour force (indicated roughly by region) and the need for communicating within the firm both vertically, for administrative purposes, and horizontally, for the exchange of information.

The percentage of French Canadians in each income group is about the same as the overall average. The proportion is a little higher in the lower income groups and a little lower at the upper end of the scale. A slightly higher than average percentage of both French- and English-speaking employees in all but the lowest income groups are required to be bilingual. The distribution of work areas by language of business is similarly very close to the overall average.

Differences in the manufacturing function due to ownership-location group generally repeat the pattern noted for total employment in all functional areas. These are not charted but are now discussed. The total number of salaried employees in the manufacturing functional area is 7023, of which 2281, or 32.5 per cent, are French Canadian. ECQ firms employ most of these (1429 or 62.6 per cent), while FCQ and ForFrQ firms together employ 196 or 8.6 per cent. In all cases except FCQ and ForFrQ firms, the percentage representation of French Canadians declines with increasing income. In FCQ firms, the U-shaped curve is once more encountered, while in ForFrQ firms, all but one of the 55 people in the manufacturing functional area are French-speaking.

The percentage of French-speaking employees who must be bilingual, which is high in all ownership-location groups, is generally above average in FCQ and ForFrQ firms, and below average in ECC firms. The percentage of English-speaking employees who must be bilingual is above average in FCQ, ECQ and UKQ firms, and it is very low in ECC and USC firms.



All ownership-location groups operate bilingual work areas. There are no unilingual-English work areas in FCQ and ForFrQ firms, and no unilingual-French work areas in ECC, UKQ and USC firms.

## *2. Marketing, including sales and advertising*

In marketing, the next largest functional area, the major influences dictating practices regarding bilingualism should be the location and language-of-use of the purchasers of the firm's product, as well as some internal factors such as the need to communicate with other departments.

The percentage representation of French Canadians in marketing is close to the overall average, but the divergencies are opposite to those encountered in manufacturing. Comparing the chart labelled "marketing" with the chart showing overall average conditions, we note that the proportion of French Canadians is lower than average in the lower income groups, and above average at higher levels. The line showing this percentage is thus quite flat. The bilingual requirement on French-speaking employees is higher than average in the two lowest income groups, and about equal to average in all higher income groups. The bilingual requirement on English-speaking employees is below average in all income groups. The percentage of unilingual-French work areas (10.6) is significantly higher than the average (7.3 per cent). This is higher than for any other functional area. The percentage of bilingual work areas (28.4) is slightly lower than the average (34.3 per cent).

In general, the characteristics of the marketing functional area tend to follow a trend away from the overall characteristics of each ownership-location group. That is, the proportion of English Canadian employees is greater in marketing in FCQ and ForFrQ firms, while the proportion of French Canadians is greater in all other English-speaking ownership groups.

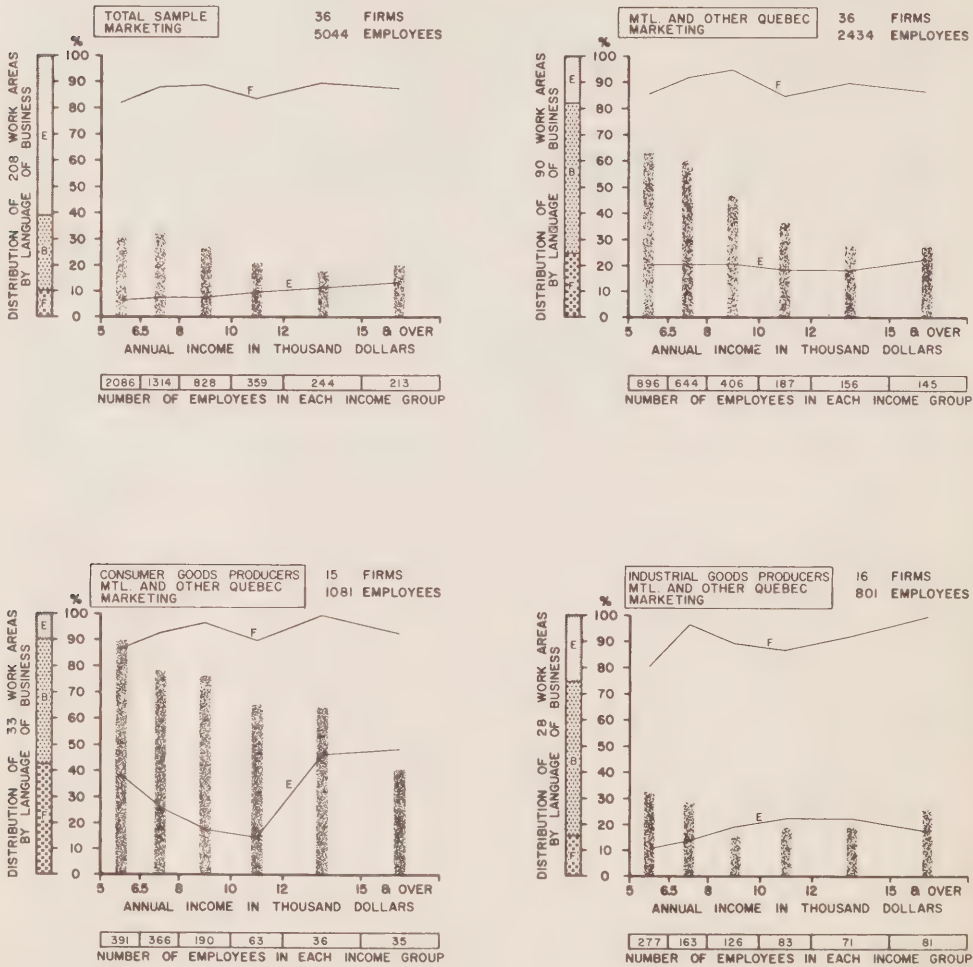
In all cases except USQ firms, the bilingual requirement on French-speaking employees is quite high. That on English-speaking employees is generally low, but it rises in the upper income groups in FCQ, ForFrQ and UKQ firms.

All ownership-location groups except USC operate unilingual-French work areas, and all operate bilingual and unilingual-English work areas. The proportion of unilingual-English work areas is, in fact, greater than 50 per cent for all ownership-location groups except ForFrQ where it is 38 per cent. The proportion for FCQ firms is 55.6 per cent.

*Effect of region.* The degree of adjustment to regional factors in marketing is quite striking, as shown in the top right chart of Figure VI.6 which depicts conditions relating to employment in marketing in the province of Quebec, including Montreal. Comparison of this with the chart labelled "Total Sample Marketing" (all regions) indicates that employment of French Canadians is higher in all income



Figure VI.6  
Characteristics of salaried employees earning over \$5,000 per annum: Differences due to product type (marketing function only)



groups, and that the bilingual requirement on English-speaking employees is about twice as high in Quebec as in the sample as a whole. Also, the proportion of unilingual-French and bilingual work areas is much greater. The proportion of unilingual-English work areas in Montreal and other Quebec is only 18 per cent, compared to 61 per cent in marketing in all regions.

*Effect of product type.* Figure VI.6 is designed to show that the marketing practices of firms operating within a region are greatly affected by the type of product manufactured. In this case, the selected region is the province of Quebec, including Montreal, and the distinction is made between producers of consumer goods and producers of industrial goods. As noted earlier, the two categories include, respectively, firms for which over 75 per cent of total sales (by value) are made to the general public, or to industrial accounts. There are 16 industrial goods producers and 15 producers of consumer goods. The remaining five firms in the sample (not included in Figure VI.6) are "mixed," in the sense that the proportion of their sales to either of these groups of buyers is less than 75 per cent.

The difference, as shown on the charts, is most striking. In the marketing functional area, representation of French Canadians at all income levels, and the bilingual requirement on English-speaking employees, are both much higher for producers of consumer goods than for those of industrial goods. The number of unilingual-English work areas (all in Montreal) is much less for consumer goods producers. It is interesting to note, also, that the curve showing the proportion of French Canadians in industrial goods firms is U-shaped, and that the curve for bilingual requirement on English-speaking employees in consumer goods firms is U-shaped as well.

This analysis shows that the adaptability of the firms in our sample to the particular conditions facing them is quite high, and that the adaptability appears to be stimulated by business considerations. Regional factors have much less effect on marketing practices if a firm is principally engaged in the manufacture of industrial materials. In this case, it is the language of the client company, and not necessarily that of the region in which the buyer is located, that is the determining factor. Conversely, firms which produce and sell consumer goods will adjust their marketing practices to regional conditions of language and buying patterns. In Chapter XII, which is devoted to marketing practices, we shall return to this area of analysis, with a view to examining the incidence of bilingualism in advertising practices, and the bilingual ability of salesmen and others who represent their employers to their buyers.

### 3. *Employee relations*

Referring once again to Figure VI.5 (p. 94), and continuing with our review of general characteristics within each functional area, we now direct our attention to employee relations. This is a relatively small functional area, in terms of the number of salaried people

employed, but the nature of the work does involve frequent, and sometimes rather sensitive, contact with employees at all levels up to senior management. The characteristics of the work force as a whole should therefore be an important determinant of practices in this area.

From Figure VI.5, we note that the percentage representation of French Canadians is well above average in all income groups, although the proportion diminishes as income increases. The bilingual requirement on French-speaking employees is very high at lower income levels, and about equal to average (still high) in the two upper income groups. For English-speaking employees, the bilingual requirement is well above average for all income groups, but still below that for French-speaking employees. The proportion of unilingual-French work areas is about average, but the percentage of bilingual work areas (46.4 per cent) is significantly higher than average (34.3 per cent).

In some ownership-location groups where average employment per firm is small, such as FCQ and ForFrQ, many of the duties in this functional area are assumed by general management. Direct employment in the employee relations area is therefore proportionately smaller in these firms than in others.

In general, the ethnicity of employment in employee relations is similar to that of ownership. Thus, French-language firms employ only French Canadians in this function (although all of them must be bilingual), while ECC and USC firms employ only a very small number of French Canadians, and these people are in the lower income groups.

In Quebec-based English-language firms, however, the proportion of French Canadians is relatively high (the line is U-shaped in the case of USQ firms). In these three ownership-location groups, also, the bilingual requirement on English-speaking employees is quite high.

*Effect of region.* The comments made above, and the chart to which they refer, apply to employment in the marketing function in all regions. In view of the importance in employee relations work of adapting to the language and ethnic patterns of the work force as a whole, it may be interesting to examine what the characteristics are in Quebec outside Montreal. Only one ownership-location group, ECQ, has a sufficient number of employees in this region to warrant analysis. Conditions here are not charted, but are discussed below.

The degree of adaptation is very high. Employment of French Canadians averages between 70 and 90 per cent and all English- and French-speaking employees except five (one English-speaking and four French-speaking) must be bilingual. Only one work area is unilingual English and two are unilingual French. The remaining eight work areas are bilingual.

#### 4. *Engineering and research and development*

Engineering and research and development together constitute the third largest functional area in our sample. Patterns of employment

here reflect the availability of technically-educated people, while work practices are affected by external factors such as the source-language of technical information, as well as internal factors stemming from the need to communicate with other departments within each firm.

The percentage representation of French Canadians is significantly below average in all income groups, as are the bilingual requirements on both French- and English-speaking employees. The proportion of unilingual-English work areas, at 62.8 per cent, is higher here than for any other functional area. The percentages of both unilingual-French and bilingual work areas are less than average.

For this functional area, it is possible to make a rough estimate of the availability of both French- and English-Canadians having the necessary educational qualifications, and compare this with sample findings. Our figures on availability are necessarily limited to engineering graduates, and it is, of course, well known that not all graduate engineers are working in this functional area. For these and a number of other reasons (including the fact that all engineers who graduated from universities outside Canada are not included in the measure of availability), our comparison is a very rough one, indeed.

Table VI.2 repeats the percentage representation of French Canadians shown on Figure VI.5. Against these figures are shown the graduates in engineering from French Canadian universities expressed as a percentage of all engineering graduates from all Canadian universities. Since, in addition, a significant number of French Canadians have graduated in engineering from McGill University (they have represented between 13 and 18 per cent of all McGill engineering graduates over the past twenty years), this number has been added to the number of graduates of French-language universities to obtain an upper-range estimate of the percentage of French Canadians in the total. Note the link that has been made between income level and years since graduation.

The interesting fact brought out by this table is that, although the representation of French-speaking people in this functional area is low, it is significantly greater than what might have been expected on the basis of availability. If it had been possible to include engineering graduates from universities in other countries in our data, the comparison would have been even more striking.

There remains very little to account for in terms of ownership-location group. We do note that the proportion of French Canadians is high at all income levels in FCQ, and at lower income levels in ForFrQ firms. Among those cases where the language of ownership is English, the proportion of French Canadians is highest in Quebec-based firms.

Unilingual-French work areas are operated only by FCQ and ForFrQ firms, and bilingual work areas are operated by all ownership-



Table VI.2  
French-speaking engineers as a percentage of total

Sample data		All engineering graduates from Canadian universities		
Income group	French-speaking employees in engineering and R & D	Graduates of French-language universities	Graduates of French-language universities plus French-speaking McGill graduates	Year of graduation
\$ 5,000 - 6,499	32	17	18	1960-64
6,500 - 7,999	27			
8,000 - 9,999	16	12	14	1955-59
10,000 - 11,999	12	7	9	1950-54
12,000 - 14,999	11	6	8	1945-49
15,000 and over	10	9	10	1940-44

location groups. However, as suggested by Figure VI.5, unilingual-English work areas are dominant.

5. Finance and accounting

Finance and accounting is the fourth largest functional area in the sample. Here, the availability factor is not as restrictive as in engineering, for one of the oldest institutions in Canada devoted to education in business is l'École des hautes études commerciales de Montréal. Although at first many of its graduates tended to favour private practice as chartered accountants, more and more of them have been turning to larger firms as places of employment in recent years. Factors such as this are reflected in Figure VI.5, where it is shown that the percentage representation of French Canadians is above average in the first income group, and almost exactly equal to average in the next three. In the two upper income groups, however, representation is only two-thirds of the overall average.

The bilingual requirements are conditioned by the need for communication within the firm among all departments, on the one hand, and general management or ownership on the other. For French-speaking employees, the requirement is well below average at first, but it rises to 100 per cent for the two upper income groups. For English-speaking employees, the bilingual requirement is almost average at first, but then it diminishes both relatively and absolutely with increasing income and level of responsibility.

The percentages of unilingual-French and bilingual work areas are both lower than for all functional areas taken together.



As Figure VI.5 suggests, of 166 people earning over \$12,000 per annum in this functional area, only 16 are French-speaking. Of these, five are employed by FCQ and two by ForFrQ firms. ECQ firms employ six and UKQ firms employ three. (USQ, ECC, and USC firms employ none.) All of the 16 people mentioned must be bilingual. We would conclude, therefore, that at higher levels of responsibility in finance and accounting, the use of English is dominant.

Unilingual-French work areas are operated by FCQ, ECQ and ForFrQ firms. All ownership-location groups operate bilingual work areas, but the proportion of unilingual-English work areas is 62.2 per cent, very nearly as high as for engineering and research and development.

## 6. *Public relations*

The public relations functional area employs fewer people than any other examined in the sample, but it is considerably influenced by the social environment of the firm. Study of the characteristics of this area is made difficult, however, by the apparent tendency of many sample firms to include public relations in the duties of general management. In fact, nearly all sample employment in this functional area occurs in only four ownership-location groups (ECQ, ECC, UKQ and USQ) with one, ECQ, dominant.

Despite this bias towards English-speaking ownership groups, the percentage representation of French-speaking people is well above average in all income groups. Similarly, the bilingual requirement on both French- and English-speaking employees is high. The proportion of bilingual work areas (57.2 per cent) is also well above average (34.3 per cent) while the proportion of unilingual-English work areas (33.3 per cent) is the lowest encountered in any functional area.

It is interesting to note that ECQ firms seem to place much more emphasis on public relations than any other group, both in terms of employment (68 people out of 86 in all ownership-location groups) and work areas (14 out of 21). As a result, the characteristics of Figure VI.5 are heavily biased in the direction of ECQ firms.

Of the total number of work areas (21) in the public relations functional area, 11 are located in Montreal and five elsewhere in the province of Quebec. Eight work areas in Montreal and four elsewhere in Quebec are bilingual. Two work areas, both in Montreal, are unilingual English. Only two work areas, both unilingual English, are located in Ontario. In addition, there are two work areas in the Western provinces and one in the Atlantic provinces, also unilingual English.

## 7. *Purchasing*

Conditions of bilingualism and the language of business in the purchasing function should give some idea of the practices pursued by firms in their roles as buyers. Although, as noted in the marketing

section, the customer should, theoretically, call the tune with respect to language or any other aspect of practice, this principle is seldom followed rigorously by firms of either French- or English-speaking ownership groups. To begin with, the influence exerted by the buyer depends on the relative size of his purchases and the existence or non-existence of alternative sources of supply.

Of primary importance to purchasing firms, however, are conditions of sale respecting price, delivery, credit, continuance of supply, service, and so forth (as confirmed to us during our interviews with both French- and English-speaking senior executives). Only when all these factors have been satisfactorily covered does the question of language arise. Much more emphasis is put on language in selling than in buying.

In general, purchasing is done at two levels. At the local or plant level a relatively large number of diverse, small-volume supplies are handled, while purchases of raw materials or major equipment (which are smaller in number but far greater in value) are usually made through contracts negotiated at head office. Sometimes this latter function is handled by general management—especially in the smaller firms. For large purchases, the language used will generally be that of supplier companies in Canada and elsewhere; it will not necessarily reflect regional characteristics.

In smaller companies, and in companies where the diversity of supply requirements is not great, the purchasing function is carried out, in the main, by more junior staff employees. Often the larger part of purchasing commitments is handled through contracts negotiated by general management. Thus, we note on Figure VI.5 that the total number of people earning over \$15,000 per annum is quite small. The percentage representation of French Canadians is generally lower than average, dropping to zero in the highest income group. The bilingual requirements on both English- and French-speaking employees are generally higher than average, rising quite substantially for English-speaking people in the income range in which there are no French-speaking employees. The distribution of work areas by language of business is about average. FCQ firms have no employees specifically designated as purchasing agents earning over \$15,000 per annum, and all 13 people earning less than that are French Canadians. Of these, all but one must be bilingual.

ECQ firms hire no French Canadians in purchasing at salaries over \$15,000 per annum, although the bilingual requirement on English-speaking employees rises sharply in that income group, as though to account for this. In lower income groups, the bilingual requirement on French-speaking employees is quite high, and it is higher than average for English-speaking employees. Even so, unilingual-English work areas predominate. Even in Montreal, of the 18 work areas operated by ECQ firms, nine are unilingual English and nine are bilingual.

The pattern of a relatively small proportion of French Canadians, all employed in the first three or four income groups, is repeated in

ECC, UKQ, USQ and USC firms. In all cases, the bilingual requirement on French Canadians is high. All ownership-location groups operate bilingual work areas, but unilingual English is dominant. Taking the province of Quebec (including Montreal), 11 out of 27 work areas are unilingual English, one is unilingual French and 15 are bilingual. In this province, the bilingual requirement on English-speaking employees is well above average, ranging from 17 to 60 per cent.

*Effect of region.* The degree of adjustment to environmental conditions at the local level is best seen by considering purchasing operations of firms in all ownership-location groups in Quebec outside of Montreal. In that region, the proportion of French Canadians and the bilingual requirement on English-speaking employees are both higher. The number of bilingual and unilingual-French work areas is also proportionately greater.



### *Part 1. Some Background Factors*

In nearly all the firms in our sample, considerable attention is being paid to the employment and promotion of French Canadians. Most members of senior management are concerned about the relatively small proportion of French Canadians in specialist or managerial positions, and most are also concerned about the fact that this proportion cannot be increased by very much within the space of a few years. Among the factors preventing a rapid increase, three stand out: (1) the shortage of educationally-qualified people who are willing to work in industry; (2) the problem of retaining promising French Canadians, once hired and trained; and (3) the reluctance of French Canadian employees to move from one company location to another.

#### *A. Availability*

The matter of the availability of French Canadians having both the necessary educational qualifications and the willingness to work in industry has been treated at some length in other studies sponsored by the Royal Commission on Bilingualism and Biculturalism,<sup>1</sup> and Part 2 of this chapter examines certain aspects of the question in some detail. The point will not be laboured here, but it does remind us that the legacy of past conditions imposes limits on the ability of manufacturing firms to increase French Canadian representation in intermediate and senior management. There simply are not enough qualified candidates to fill all possible openings. The situation with respect to more junior positions is improving markedly, for in recent years the number of young French Canadians graduating in engineering, science and commerce has greatly increased. Most company executives mentioned this factor during our interviews with them, and they expressed the hope that these younger people will, eventually, find their way to senior positions.



*B. Retention*

The current shortage of qualified French Canadian candidates, coupled with particular social factors which encourage them to place more emphasis on the professional aspects of work, leads to the second problem: most industrial firms have great difficulty in attracting and (more importantly) retaining young French Canadians. There are, in the view of company managers, too many other job opportunities in areas that seem to lay more emphasis on professionalism or the "white collar" type of work. Foremost among these alternative employers are the Quebec civil service, agencies of the Quebec government, and many recently-formed French Canadian consulting engineering firms. It may be significant that, in most cases, these employers use French as the working language, although very few management people interviewed mentioned this as a contributing factor. We did hear many stories, however, of promising young French Canadian employees who had been "on their way up" in the company, but had left to work for a French-speaking firm (including FCQ competitors) with the promise of higher pay, a more impressive title, a more "professionally-oriented" job, or a combination of such inducements.

In response to this, salaries offered to French Canadians have been going up, particularly at middle management levels where more flexibility is possible. The requirement of bilingualism is always present as a matter of course, together with ability or qualifications. The salary premium for French Canadians with bilingual ability was set at about 10 per cent by some executives, and up to 25 per cent by a smaller number of others. In some cases, it was stated that no premium exists, as such; bilingual ability is simply part of the job specification now, whereas it had not been 10 years ago. No one mentioned a premium for English-speaking employees who are bilingual except in general terms relating to their changes of further promotion. We are inclined to interpret this, however, not as evidence of discrimination against English-speaking employees, but as a commentary on the fact that the principal language of business is English.

Some indication of the attitudes of management towards the promotion of French Canadians was suggested by the manner in which many executives talked about recent cases in point. It seemed to us, to make a very broad generalization, that instances in which a position previously held by an English-speaking staff member had been filled by a French-speaking (bilingual) successor were related to us with some enthusiasm, although the number of such cases is still relatively small. Wherever English had followed English, or French followed French, the attitude seemed to be neutral. But where English had succeeded French, the situation did not seem to be viewed with the same approbation. It appeared from the discussion that such appointments had been made only after all management people concerned had been assured that no other solution was feasible, and that special qualifications and availability had had to be considered.

This was the impression we received from English-speaking managers of English-language firms, and from French-speaking managers of French-language firms, and it should be borne in mind that the nature of this study, coupled with recognition of outside social and political pressures, tended to put the onus on them to talk in such terms. Of particular interest is the fact that French-speaking executives of English-language firms, whenever they were present at our interviews, seemed to have a different viewpoint. They tend to prefer an attitude which treats each candidate on his own merits, regardless of his mother tongue, and they do not seem to feel that the appointment of a French Canadian to a supervisory position should be an especially noteworthy event.

### *C. Mobility*

Managers of firms in all ownership-location groups were unanimous in their conviction that French Canadian employees are much less willing to move than their English-speaking counterparts. In some firms, the organization is such that this does not matter, but in most cases, experience at various company locations is a prerequisite for promotion into upper management.

An interesting viewpoint, which was often mentioned (usually voluntarily), is that lack of mobility is due in large part to the influence of the employee's wife. It is well known that French Canadian social patterns are heavily influenced by close family ties which have begun to diminish in importance only very recently. But we discovered that, in the last three or four years, the wife's influence is beginning to be felt also by English-speaking employees in cases where a move into Quebec is contemplated. It seems that uncertainty about living and social conditions, schooling, and the language used in community relations is beginning to affect the willingness of English-speaking wives to move to Quebec in somewhat the same way as uncertainty about the same factors tends to discourage French-speaking wives from moving away from this province. It is impossible to say, however, whether the reluctance to move on the part of English-speaking wives is a temporary reaction to the "wave of terror" which swept Quebec a few years ago, or whether it is the beginning of a trend which will continue to develop. As we shall see later in this chapter, however, there was still, in 1964-5, a net influx of English Canadians into the Montreal region and even into Quebec outside of Montreal.

Some of the most outspoken comments regarding the low mobility of French Canadian employees came from executives of French-language firms. One reason for distinguishing, in this study, between firms having plants only in Quebec ("regional" firms) and those having plants all across Canada ("national" firms), was to test the hypothesis that mobility within Quebec would not be affected by problems related to confessionality or language in schooling, or the language

of the community, and if these were the principal factors, regional firms should have no problems with mobility. However, as we shall document later in Part 3 of this chapter, and as pointed out to us in our interviews, French Canadians tend to prefer to remain within their home community, not just within their province. Thus, regional firms face much the same problems with respect to mobility as do national firms.

Executives of one French-language firm cited the case of an opening for the position of district sales manager in the Sherbrooke area. The salary was one-third to one-half as high again as the incomes received by salesmen in the Montreal area, and it was decided to offer the job to Montreal area salesmen, beginning with the most senior man (in terms of length of service with the company). When he refused, the position was offered to the next most senior salesman, and so on down the line. The move was finally accepted by the seventh man to be asked, a fairly recent employee with less than a year's service. In taking the job, he saw his salary more than double.

In another case, a company starting up a new plant elsewhere in Canada decided to relocate a number of key men from one of its Quebec plants as a group, moving them and their families as a community, complete with parish priest. Despite these advantages, a relatively large proportion of men requested a transfer back to Quebec after the new plant had been brought into production.

Problems of mobility and the influence of wives can sometimes take a humorous turn. One FCQ firm recently had to part company with a good traveling salesman in the Quebec City area because his wife insisted that he come home for lunch every day!

The composition and characteristics of current employment, as analyzed in Chapter VI, are the result of policies and practices regarding hiring and retention that have existed for the past 20 years or more. In an effort to determine the effects of any changes that may now be taking place—changes that would alter the characteristics in future years—we should now look at recent hiring practices and then at employee mobility. Any changes affecting the proportion of French Canadians in the total number of new employees hired would presumably reflect external factors, such as social attitudes and the development of educational institutions, as well as internal factors such as new or revised corporate policies designed to attract French Canadian applicants.

## *Part 2. Recent Hiring Practices*

### *A. The 35-Firm Sample*

As a part of this study, information was gathered on all people hired at salaries over \$5,000 per annum during the 12-month period ending 30 June, 1964. In order to permit comparison of the characteristics of this incoming group with the current stock of employees, steps were taken to ensure that the data on recent hiring could be presented in the same degree of detail, and with the same breakdown, as that used in Chapter VI. Thus, the charts used for reporting and analysis in this chapter are substantially the same as those used earlier.

To the extent that newly-hired employees remain with the firms in each region or ownership-location group, and are promoted through various income groups, these charts offer a rough forecast of the future characteristics of employment within sample firms. At the very least, the direction of current changes can be observed.

Of the 36 firms which gave us sufficient information to construct the charts in Chapter VI, 35 were able to give us data on hiring. Thus, our "datum line," or basic sample, is reduced by one firm in the present analysis. This reduction should not significantly affect our analysis for, although the total number of currently-employed salaried people has dropped from 19,888 to 18,332 in the 35-firm sample, the percentage of French Canadians in each income group never differs by more than one percentage point from the 36-firm sample. The bilingual requirement on French-speaking employees is similar, differing by only six percentage points in 82, at the most. The figures showing the bilingual requirement on English-speaking employees, and distribution of work areas by language of business, are also very close. Thus, the new norms shown on Figure VII.3, which will be the basis for all comparisons with recently-hired people, can be used with a fair degree of confidence.

### *B. The Standard Chart*

The total number of people hired was 749, or 4.1 per cent of total employment above \$5,000 per annum in the 35 sample firms. The characteristics of this group (with respect to the proportion of French Canadians, and bilingual requirements) are shown on Figure VII.3 (p.114). The procedure used in presentation and interpretation of data is similar in all respects to that followed in Chapter VI (Current Conditions: Salaried Employees), except that each chart used in this chapter is really two charts in one. Data relating to hiring practice are superimposed on the chart showing relevant data on the current stock of employees. Thus, the charts used in this chapter show comparative data on each of the three characteristics of sample



Figure VII.1  
Recent hiring, French Canadians: Expected

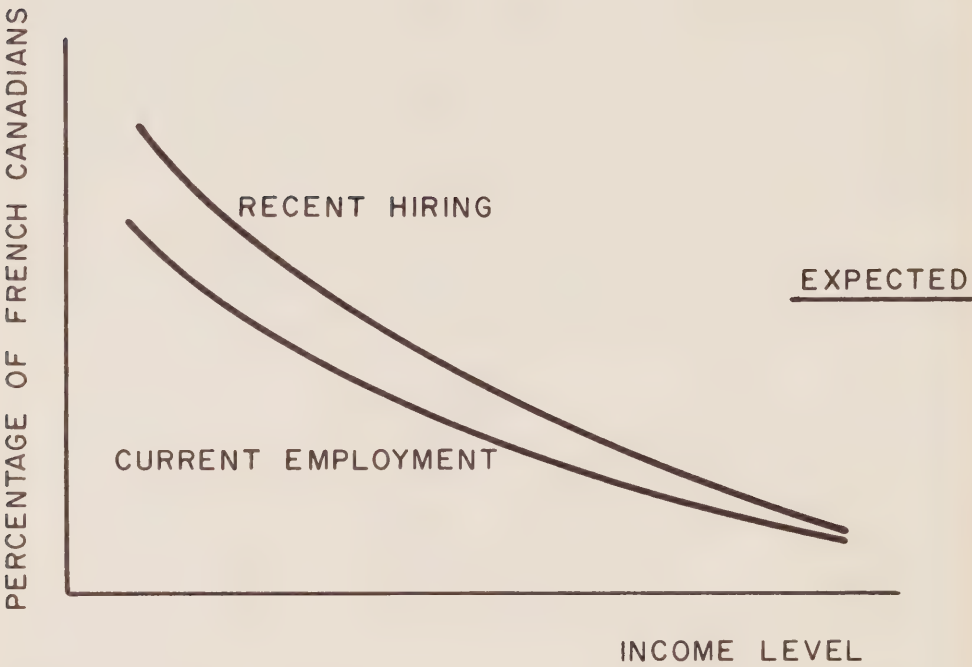
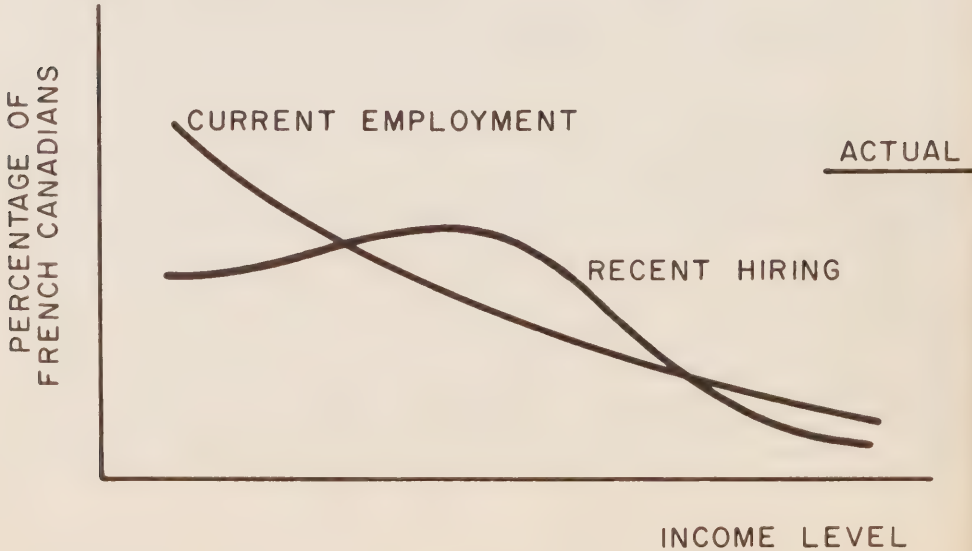


Figure VII.2  
Recent hiring, French Canadians: Actual





firms: the proportion of French Canadians in each salary group, the bilingual requirement on French-speaking employees, and the bilingual requirement on English-speaking employees. As before, all plotted lines show percentage figures, while the number of people in each group is shown in appropriate boxes below the chart.

### *C. Analysis of the Total Sample*

Before coming to an examination of actual results, we might put forward a hypothesis based on the general factors already discussed, namely the increasing availability of French Canadian university graduates in engineering, science and commerce, and changing social attitudes which would tend to direct the career choices of these recent graduates towards business in general and towards large firms such as those in our sample, in particular. In addition, we would include the greatly-intensified efforts now being made to attract qualified French Canadians, as impressed upon us during our interviews with senior officers of large companies. This "push-pull" combination of influences should increase the number of French Canadians at all income levels, especially the lower salary groups which are the natural starting point for recent graduates.

In Chapter VI, we discovered that, if the proportion of French Canadians is plotted against income level, the result is a line which slopes downward to the right. A similar line, based on the hypothesis outlined above, should lie somewhat above the first, and similarly, slope downward to the right, as shown in Figure VII.1.

In fact, as shown in Figures VII.2 and VII.3, the comparison is quite different.

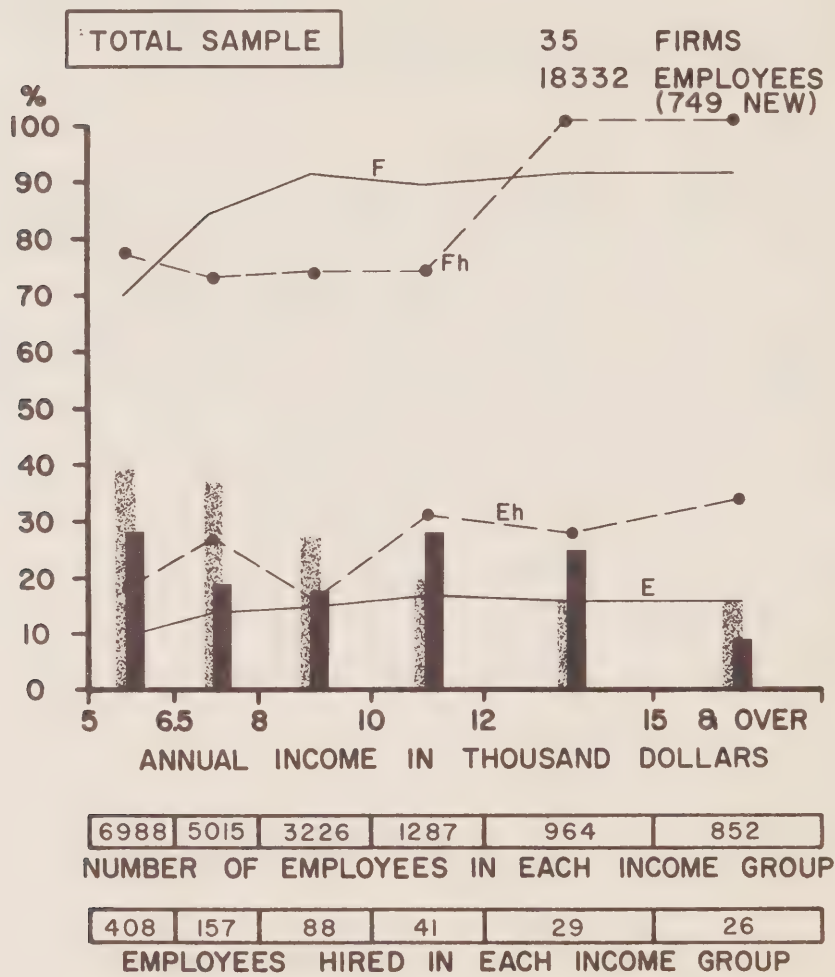
The percentage of French Canadians in the newly-hired group is higher than it is in the existing stock in the middle income groups, but it is less at both low and high income levels. Further, the proportion of French Canadians in the newly-hired group (taking all income groups together) is only 23 per cent, whereas it is 31 per cent of the total current employment. Examination of further charts will show that this pattern is quite consistent for most ownership-location groups and most functional areas.

Quite evidently, our hypothesis will have to be modified. We do not believe it should be discarded altogether, for the overall tendencies are certainly present in the background even though their effects are being tempered by other forces.

We learned during our interviews that, despite intensified efforts to attract recent graduates from French-language universities, most firms are encountering considerable difficulty in attracting as many young French Canadians as they would like to have. The reasons are not entirely clear, but in many cases the employers' requirement of bilingual ability, coupled with the rather cool image many young French Canadians have of "big business," tends to predispose them

Figure VII.3

Recent hiring, salaried employees earning over \$5,000 per annum: Basic chart



1. Column chart shows percentage of French-speaking employees in each income group. The solid black column relates to recently-hired employees; the stippled column relates to all current employees.
2. Single lines show percentages of French-speaking (F) and English-speaking (E) employees whose jobs require bilingual ability, by income group. Dashed lines and subscript "h" relate to recently-hired employees.

against working for large firms. At the same time, many alternative job opportunities are now open, including work in provincial government departments or agencies, and in smaller professional or consulting firms. These offer a greater chance to work in a French-speaking environment, and they also appear to give more emphasis to the professional aspects of work.

Although manufacturing firms such as those in our sample would prefer to employ a greater proportion of French Canadians, they can go only so far in satisfying this preference. To some extent, they can, and do, offer slightly higher salaries for bilingual French Canadians, but they cannot upset their internal salary structure. As one company officer put it: "We will need about 65 engineering graduates this year. We would prefer it if about a third of that number was French Canadian, and we are trying to get them, but because of the overall shortage of engineers, we'll be glad to take whatever we can get from any university. The main point is that we need 65 men, and if we can't find them in Canada, we'll go to England, or even Europe, to make up the number. Last year, we wanted 60 and only got 33, so we are short to start with."

In the middle income groups, the requirements of changing policy are more stringent. If the company's image requires, for example, that the new manager of the Quebec City sales office be a French Canadian, it is much more difficult to substitute an English Canadian or a European here than in jobs in lower income groups. Fewer people are involved, and the requirements of maintaining a balanced salary structure seem to be less restrictive. Thus, in part, the rising percentage of French Canadians in the middle income groups (compared to a lower percentage figure in adjoining lower income groups) may be the result of a shift of some people to a higher income level in response to this specific demand. As noted earlier, several firms reported that bilingual French Canadians command a salary premium of from 10 to 25 per cent.

To an extent, newly-hired employees in these income groups may simply be coming from other large manufacturing firms. We do not have information on resignations from employment. Nor do we have any way of estimating whether the tendency to change employers is greater among French Canadians than English Canadians.

In the top income group (over \$15,000 per annum), the percentage of French Canadians amongst those hired is again less than amongst those already employed. At this level, the number of English and French Canadians hired is very small indeed, as most companies prefer to promote from within. The comparison of percentage figures, therefore, gives us very little basis on which to forecast what the representation of French Canadians will be in future years; the percentage figure in the next lower income group is a better indication of that. We do note, however, that the number of French Canadians moving into senior positions in large firms is proportionately less than the total number now employed in these positions. We would conclude,

therefore, that either the French Canadians at this level are more stable (less likely to move to another job) than their English Canadian counterparts, or else that fewer are willing to remain in the manufacturing industry. With regard to this latter possibility, we do know that the management needs of the new government-sponsored companies and agencies in Quebec are very great at present. At least one agency with staffing problems at its inception was given specific instructions that it was not to raid other agencies, or the provincial civil service, or the universities. This would leave, as a source of French Canadian administrators, only private industry and some financial institutions.

The changing bilingual requirements on both French- and English-speaking employees, as shown on Figure VII.3\*, are about in line with what would be expected from the relationships already observed. For recently-hired French-speaking employees, the requirement is generally lower in the three middle income groups. It is very slightly higher for people entering at incomes ranging between \$5,000 and \$6,500 per annum, but it remains at about the same level up to incomes of \$12,000 per annum and over, at which point it rises to 100 per cent. The general shape of the curve indicates that it is becoming possible for more French Canadians to rise higher in the organization before the bilingual requirement is imposed. For new English-speaking employees, the bilingual requirement is approximately twice as high as it is for those already employed, although it still is at a relatively low level.

#### *D. Differences Due to Ownership-Location Group*

Differences in hiring practices due to ownership-location group are depicted in Figure VII.4. As before, conditions relating to the total sample (Figure VII.3) are shown in the top left corner, for reference.

##### *1. FCQ firms*

Since the total number of people hired by this group of firms is small, the movement of lines depicted on the chart tends to be rather erratic. Recalling our problem concerning what has happened to the increasing number of French Canadian university graduates who would be candidates for work in large manufacturing firms, we note immediately that they have not gone to FCQ firms. Nor, as shown in Figure VII.4, have they gone to ForFrQ firms either. In fact, of the 15 people hired by FCQ firms, only six are French Canadians. When analyzing current employment in Chapter VI, we noted that in the

---

\*Dashed lines are used to indicate the bilingual requirements on newly-hired French- and English-speaking employees. In addition, the letter "h" is included to facilitate identification, e.g. Fh and Eh.



relatively important middle-management group, over half of all employees of FCQ firms are English-speaking and that the percentage curve is U-shaped. Here we see that recent hiring practice has tended to accentuate this anomaly, not reduce it, for all three incoming employees in the \$10,000 to \$12,000 per annum group are English-speaking, while in the next higher salary group, all four new employees are French-speaking.

New French-speaking employees earning below \$6,500 per annum are not required to be bilingual, but those at salaries higher than that must all be bilingual. None of the new English-speaking employees is required to be bilingual.

## 2. *ECQ firms*

This group of firms, which accounts for about half of all hiring in the sample (and about half of total employment as well) naturally exhibits characteristics similar to those of the total sample. All the general comments made earlier, therefore, apply here.

Of particular interest is the fact that the bilingual requirement on new English-speaking employees continues to rise with increasing income, whereas for people already employed it drops after the income midpoint. For new French-speaking employees, the bilingual requirement falls through the lower income groups before rising to 100 per cent for the two top groups.

## 3. *ECC firms*

The relative positions and shapes of the two lines depicting the percentage of French Canadians among both current and newly-hired employees are about the same for ECC firms as in the total sample. That is, the line for recently-hired employees is higher in the middle and lower at each end of the income scale. But there is one difference: the "hump" in the line occurs in the third and fourth income groups, not the fourth and fifth, as in the total sample. Above \$12,000 per annum, there are no French Canadians among recently-hired employees. This seems to be because the head offices of these companies are located outside Quebec, as there is a tendency for people earning higher salaries to be based at head office.

The bilingual requirements on incoming French-speaking employees are substantially higher than they are for those already employed, rising to 100 per cent in all but the first income group. Higher bilingual requirements are similarly imposed on new English-speaking employees in the first four income groups, but then they fall to zero.

## 4. *ForFrQ firms*

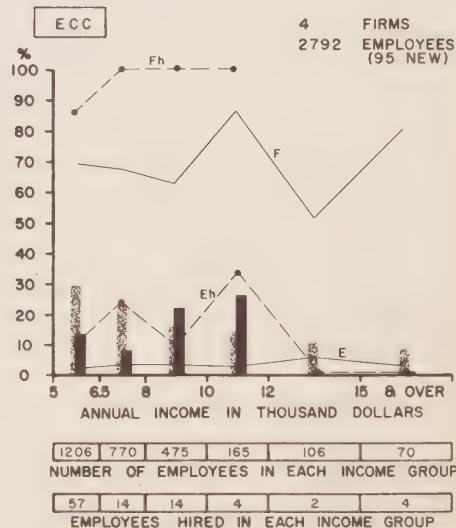
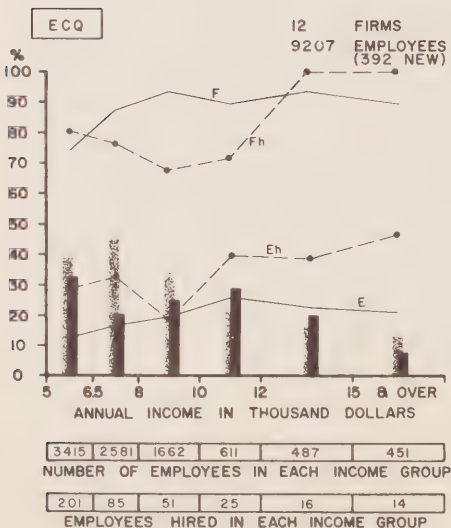
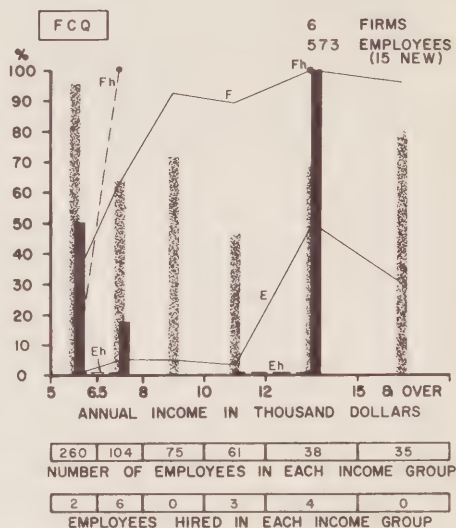
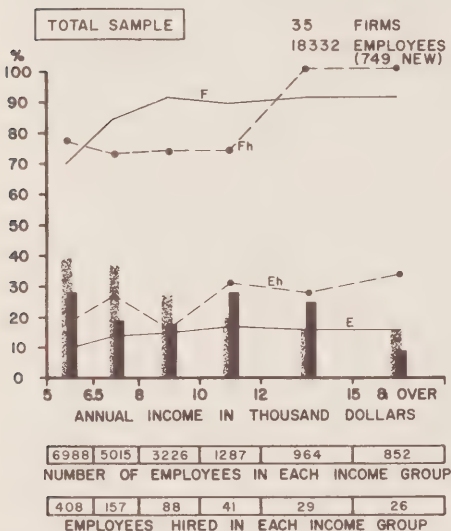
Only 14 new employees were hired by this group of firms during the 12-month period, and all but one of these were English Canadians.

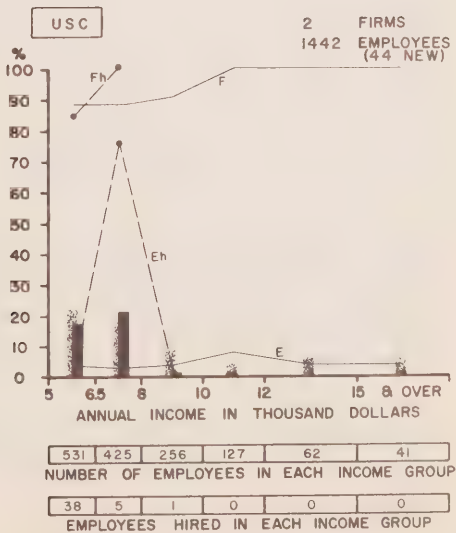
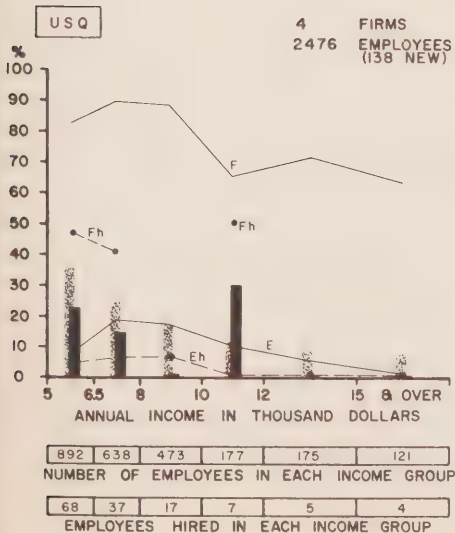
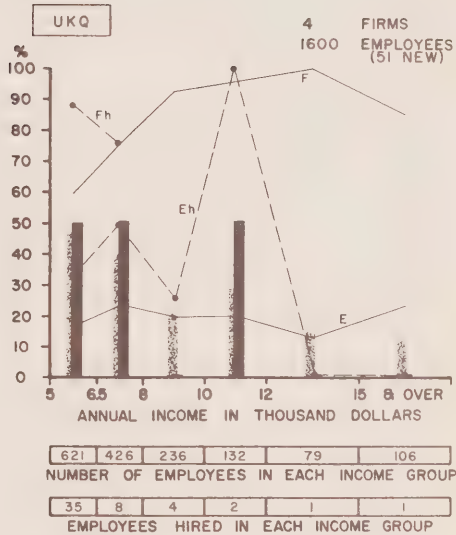
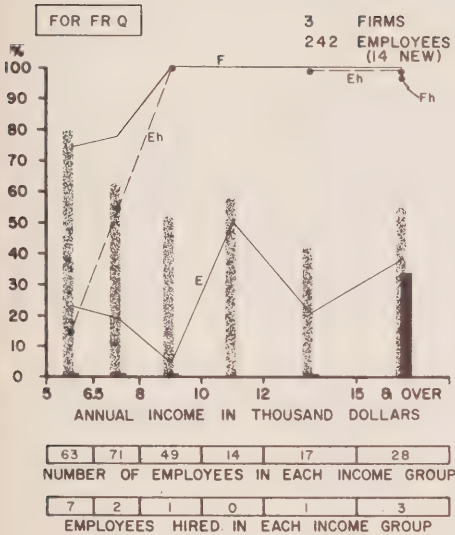
The one French Canadian (hired at a salary over \$15,000 per annum) and all 13 new English Canadians in the four upper income groups are required to be bilingual.



Figure VII.4

Recent hiring, salaried employees earning over \$5,000 per annum: Differences due to ownership-location





The pattern of hiring tends to accentuate the U-shape of the curve depicting the proportion of French Canadians, as it does in the case of FCQ firms. As mentioned in the comments on FCQ firms, there seems to be no tendency for recently-graduated French Canadians to seek jobs in firms where the ownership is French-speaking in preference to firms where the ownership is English-speaking.

#### 5. *UKQ firms*

This is the only group of firms in which the proportion of French Canadians is greater for recently-hired employees than it is for current employment. Of the 51 people recently hired, 22 are French Canadian, and the line showing their proportion to the total lies above that for current employment in the first two income groups as well as in the mid-range. In all other income groups, however, the proportion falls to zero. It should be emphasized that the number of people in the sample is small and the percentage figures thus tend to become erratic.

The bilingual requirements on new French-speaking employees are slightly higher than they are for those already employed. For English-speaking employees, the increase in bilingual requirements is substantial, rising to 100 per cent in the middle income group. Beyond that, however, the requirement drops to zero.

#### 6. *USQ firms*

As we noted in Chapter VI, this group (along with USC firms) is particularly interesting because the external influences of technology and internationalization of business seem to be stronger on it than on other groups. This pattern is repeated in the data relating to new employees.

New hirings account for 5.6 per cent of total current employment in this group of firms, compared to 4.1 per cent for the sample as a whole. The number of people hired, 138, is second only to ECQ firms (392), and in that group, new hirings account for only 4.3 per cent of current employment. We can thus perceive a somewhat greater than average rate of expansion in salaried staff.

Of the 138 new employees, 22 (16 per cent) are French Canadians and all but two of these were hired in the first two income groups. The hump in the line, created by the two French Canadians employed in the \$10,000 to \$12,000 salary range, is proportionately greater than in any other group of firms, but apart from this, no French Canadians were hired at incomes over \$8,000 per annum.

The trend in the language of business is similar. For both English- and French-speaking recently-hired employees, the bilingual requirements are lower than for those currently employed.

## 7. *USC firms*

In the USC group we have the most pointed example so far of firms which prefer to fill vacancies occurring at upper income levels by promotion from within rather than by hiring from outside. In our sample, no one was hired at a salary above \$10,000 per annum, and 38 out of 44 new employees entered the firms at the lowest designated income level.

The hump is still observable in the line representing the proportion of French Canadians in the incoming group, but it occurs here at the second-lowest income level, and in any event it represents only one employee. That one French Canadian is required to be bilingual, as were three of the four new English-speaking people hired into the same income group. For new employees in the two adjacent income groups, the bilingual requirements are slightly lower than those imposed on people hired in earlier years, dropping to zero in the case of new English-speaking employees.

## E. *Differences Due to Location of Operations*

Differences in hiring practices that may be due to the region in which company operations are located are shown in Figure VII.5, where data are plotted for each of the five designated regions (Montreal, Quebec excluding Montreal, Ontario, the Atlantic provinces and the Western provinces) as well as for the sample as a whole. The number of French-speaking people hired for work in Ontario, the Atlantic provinces and the Western provinces is really insufficient to permit meaningful charting, and the charts for these three regions should be interpreted only as giving a very general indication of relative conditions. The charts relating to Montreal and the rest of Quebec do, however, offer significant and consistent information.

### 1. *Montreal region*

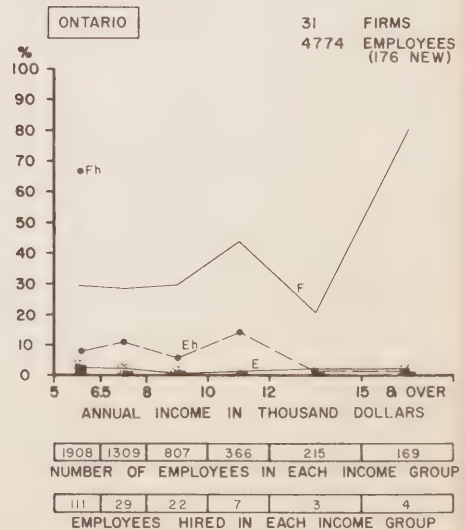
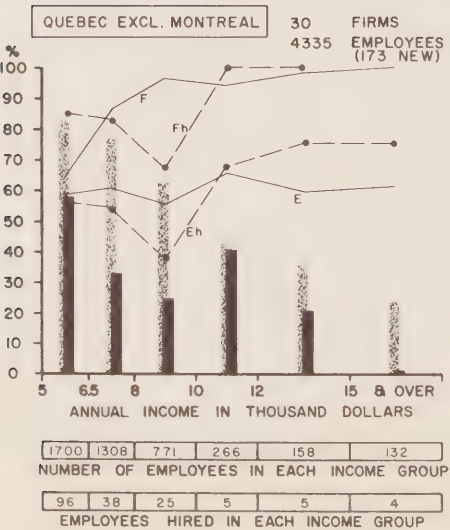
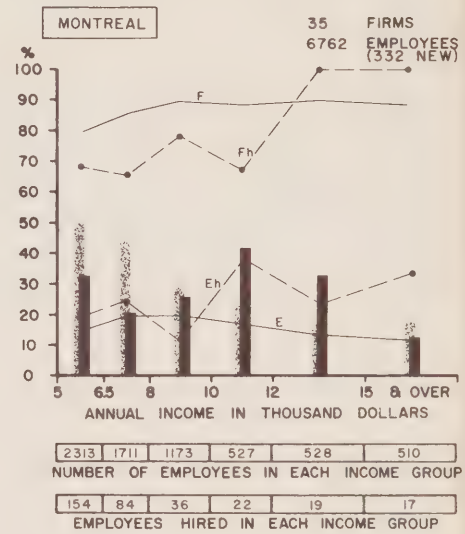
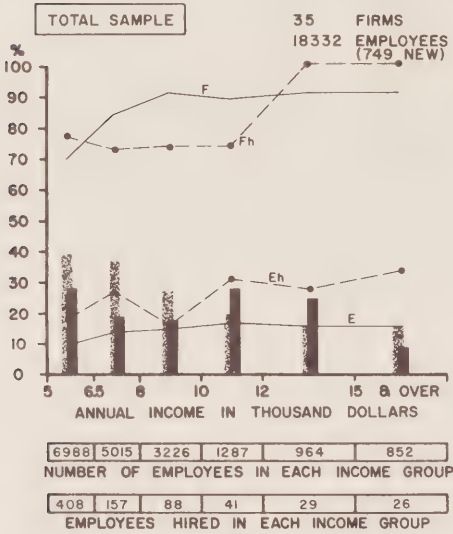
The number of new employees hired in the Montreal region amounts to 332, or 44.3 per cent of all hiring in the sample. Of this number 92, or 27.7 per cent are French Canadian.

Because of the dominance of the Montreal region in the sample, the characteristics of the chart for Montreal are generally similar to those of the reference chart representing the total number hired in all regions. However, the effect of region is noticeable; in Montreal, most relationships are accentuated. The hump is still observable, and it occurs in the same two income groups, but for Montreal, it is relatively greater and the curve is shifted upward.

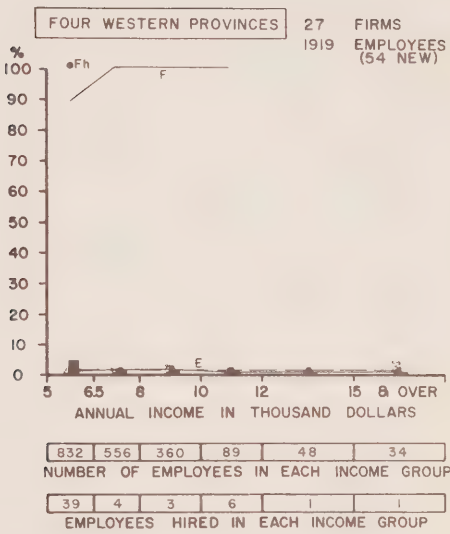
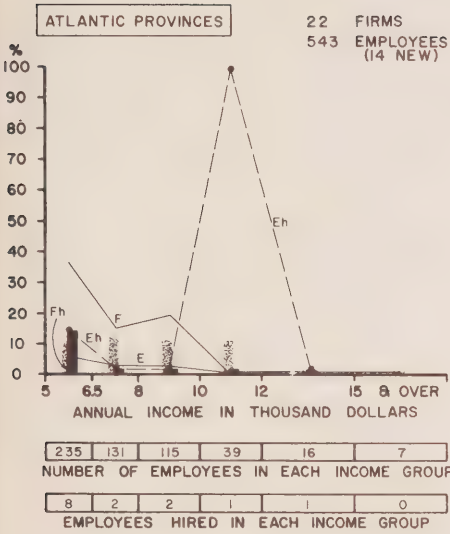
The changes in bilingual requirements imposed on both French- and English-speaking employees are also similar to those encountered in the total sample, discussed earlier. That is, the requirements are generally higher for new English-speaking employees and generally lower for new French-speaking employees. In addition, fewer of the

Figure VII.5

Recent hiring, salaried employees earning over \$5,000 per annum: Differences due to location of operations







new French-speaking employees at lower income levels are required to be bilingual, while more of the new English-speaking employees at higher income levels need to be bilingual.

Differences due to ownership-location within each region are not charted, but it is interesting to note that two ownership-location groups, ECQ and USQ, account for nearly 85 per cent of all hiring in the Montreal region. Among ECQ firms the proportion of French-speaking people among newly-hired employees is higher than the average for all firms in Montreal, and the hump extends over the three middle income groups. The bilingual requirement imposed on new English-speaking employees is also substantially higher than for those previously employed, although it remains lower than the requirement of French-speaking employees.

In USQ firms the bilingual requirements on all new employees are substantially lower than they are on people previously hired. Among French-speaking people, the requirement on new employees is only about half as great as it is for those already employed, while for new English-speaking employees the requirement drops to zero at all income levels over \$8,000 per annum.

The rate of hiring by USQ firms is even greater in Montreal than it is in Canada as a whole (6.2 per cent of total employment versus 5.6 per cent).

## *2. Quebec excluding the Montreal region*

Although, as seen in Chapter VI, the percentage of French Canadians in the current salaried staff is greater in the rest of Quebec than in Montreal in all income groups, this relationship does not hold for recently-hired employees. In the two lowest income groups, the proportion of French Canadians among newly-hired employees is higher than in Montreal, reflecting, in part, the fact that some salaried staff (like most of those on the wage-roll) are hired locally. But at all income levels over \$8,000 per annum, the percentage (and absolute number) of French Canadians being hired for work in Quebec outside of Montreal is less than in Montreal. The result is that, although the line relating to new employees is still humped in the middle income range, it never rises above the line depicting staff hired in earlier periods. The trend, therefore, is toward *decreasing* representation of French Canadians in salaried jobs in Quebec outside of Montreal.

Since the people required for upper income groups are usually not available locally, but are brought in from elsewhere, these results appear to document a problem mentioned to us several times during our interviews with executives of companies in our sample. These men expressed the belief that a French Canadian with the university training or equivalent experience needed to fill the more senior management positions, places more emphasis on culture and the arts than does his English Canadian counterpart. He is thus much more likely to prefer to live in Montreal where cultural activities are

more readily available to him. We learned that several new plants which had been built in Quebec, to be staffed and operated in French, were confronted with this problem. When the firm began its search for managers, it discovered, first, that few qualified French Canadians were available, and second, when suitable candidates were found (either inside or outside the firm), they were often unwilling to move to a remote town. In most instances, the problem was finally resolved by sending English Canadians (though as few as possible), after giving them courses in French.

### *3. Ontario, Atlantic provinces and Western provinces*

As noted earlier, employment of French Canadians in all regions outside of the province of Quebec is low, and new hirings do not indicate any change in these conditions. In general, in the Atlantic provinces and Ontario, the bilingual requirement on new English-speaking employees is slightly higher than it is for people hired in earlier periods.

## *F. Differences Due to Functional Area*

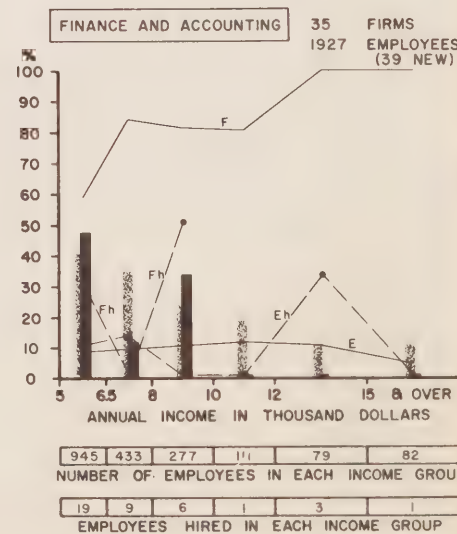
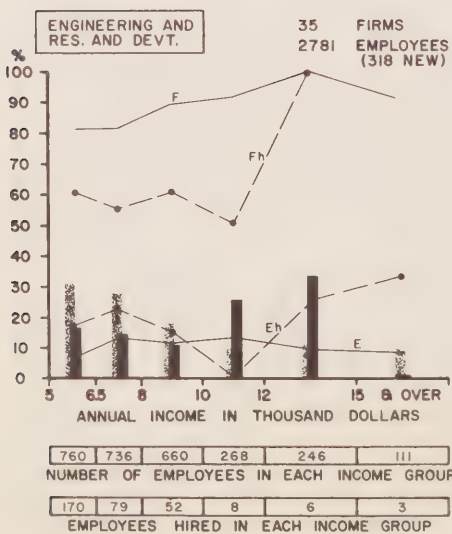
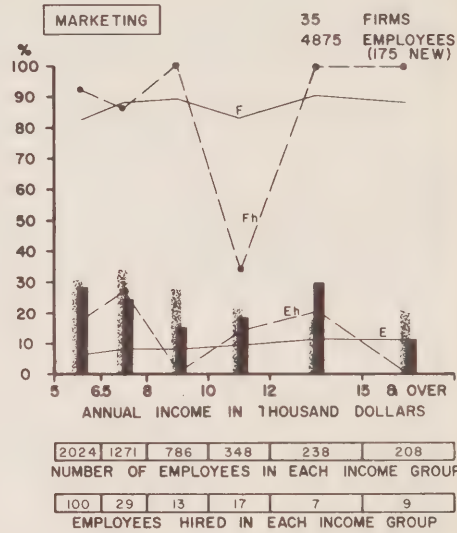
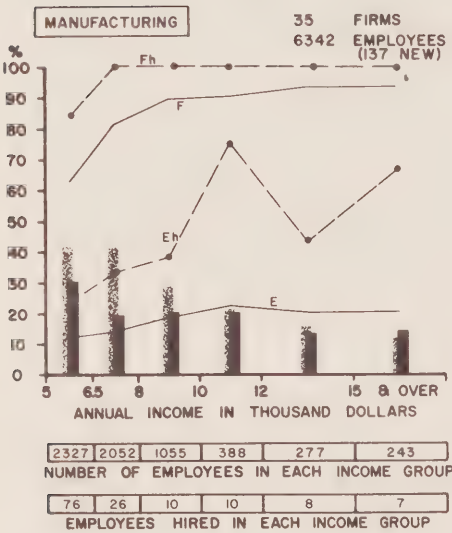
Figure VII.6 depicts changing conditions due to recent hiring in the functional areas of manufacturing, marketing, engineering and research and development, and finance and accounting. The number of people hired to work in other functional areas was too small to permit detailed charting, but such people are of course included in the reference chart relating to total hiring shown in Figures VII.3, 4 and 5. Figures on all charts relate to hiring in all regions by firms in all ownership-location groups.

### *1. Manufacturing*

Manufacturing, which by a considerable margin, has more salaried staff earning over \$5,000 per annum than any other functional area, is only third largest in terms of new hiring. This would imply a stability in this functional area, as might have been anticipated from a consideration of the type of work involved and the emphasis often placed on experience in the plant. Even so, the changes in the characteristics of the incoming group are quite striking, as Figure VII.6 indicates.

The bilingual requirement on new French-speaking employees is higher in all income groups, reaching 100 per cent at the second income level. Possibly this is the result of the growing need to maintain close contact between the managers or supervisors of manufacturing at all levels and those of other departments within the firm. In technical matters, as we have seen, the language of communication is English. At the same time, bilingualism (not only the ability to speak English) is an asset to the supervisor who must communicate frequently with wage-roll and junior clerical employees hired locally. The bilingual requirement on recently-hired English-speaking employees

Figure VII.6  
Recent hiring, salaried employees earning over \$5,000 per annum: Differences  
due to functional area\*



\*The reference chart relating to the total sample is not shown here but may be seen in Figures VII.3, 4 or 5 (pp. 114, 118 and 122).



is substantially greater also, mainly because French is needed for internal communication in plants located in French Canada.

The percentage of French Canadians in the incoming group is less than that for people already employed in all but the top income group, and even here, the figure indicates only one man. This, as well as the change in bilingual requirements, seems to confirm the underlying problems of availability and mobility discussed earlier.

*Effect of region* (not charted). Regional differences within this functional area are not charted, but they can be described verbally. In the Montreal region, the bilingual requirement on English-speaking employees (new and old) drops in the upper income groups. For new employees, however, the requirement does not begin to drop until a higher income group is reached. The three French Canadians hired at incomes above \$10,000 per annum (one in each income group) must be bilingual.

In Quebec excluding Montreal, all four people hired in the two top income groups were English Canadian, and all were required to be bilingual. The bilingual requirement on new French Canadian employees is also substantially higher, reaching 100 per cent in the second income group. In all income groups, the proportion of French Canadians among recently-hired employees is below that of total salaried staff.

## 2. *Marketing*

The selection of staff for the marketing function is influenced to a large extent by the need to meet the requirements of the buyer, whether the buyer is the general public or another manufacturing company. In Chapter VI it was noted that the line showing the percentage of French Canadians by income group was relatively flat. Here we note that the equivalent line relating to recently-hired employees is similarly flat. Also, the two lines are very close. For any income group, a difference in the mother tongue of not more than two new men would shift the dashed line to the other side of the solid (total current employment) line. Slightly more new employees, both French- and English-speaking, are required to be bilingual. In summary, little change due to recent hiring is observable in this functional area.

*Effect of region and product type* (not charted). In the Montreal region there appears to be a slight shift towards an increasing bilingual requirement on both French- and English-speaking new employees but otherwise there is little change.

The difference between firms selling consumer goods and those selling industrial materials is more marked. In the Montreal region, consumer goods firms hired 12 French-speaking and six English-speaking people, while producers of industrial materials hired nine of each. In the province of Quebec outside of Montreal, consumer goods producers hired three French-speaking and no English-speaking people



for work in marketing. Industrial goods producers hired 14 French-speaking and 16 English-speaking people.

### 3. *Engineering and research and development*

Engineering and research and development together constitute the third largest functional area in terms of employment of salaried staff, but they account for a significantly greater number of new employees than any other. The number of people recently hired here, 318, is 42.5 per cent of total hiring in the sample, and it is equivalent to 11.4 per cent of total employment in this functional area.

This rate of acquisition of new staff can probably be attributed to a high turnover rate (characteristic of the mobility of technically-trained people) and a high growth rate in this functional area. It is not possible for us to separate the two. There is possibly a third factor: in many firms, recent engineering graduates are given their initial training in the engineering office before being re-assigned to other departments.

The line showing the percentage of French Canadians among new employees is humped, but the hump represents only four people, as the total number of staff hired at upper income levels is very low. In the three lowest income groups (which account for 301 out of the 318 new employees), the bilingual requirement on new French-speaking employees is substantially less than it is for those hired previously, while for new English-speaking employees, the requirement is somewhat higher.

*Effect of region* (not charted). In the Montreal region, the bilingual requirement on new French-speaking employees in the lower income groups is lower still. For new English-speaking employees, the bilingual requirement drops below the datum and then to zero with increasing income, although it may be significant that the single person hired at a salary over \$15,000 is required to be bilingual.

### 4. *Finance and accounting*

The characteristics of the relatively small incoming group tend to confirm the continuing use of English as the language of business in the functional area of finance and accounting, although there is a suggestion that the use of French is increasing slightly. Only five people were hired at salaries over \$10,000, but all of these are English-speaking, and for all but one of them (working in Quebec outside of Montreal), there is no bilingual requirement.

Of the 39 people hired, 13 are French-speaking. The bilingual requirement on them is significantly lower than that for people hired previously, dropping to zero in one case (working for an ECQ firm in the Montreal area). For new English-speaking employees, the bilingual requirement is slightly higher in the first two income groups, and then it drops to zero for all except the one case noted above.

*Part 3. Relocation of Employees*

In the previous section we examined, in part, the way in which patterns of employment are being altered by current hiring practices. In particular, it was noted that the proportion of French Canadians in salaried staff earning over \$5,000 per annum is tending to increase in the middle salary groups and diminish at both the high and the low levels.

Changes in employment patterns within a given region can also be brought about through relocation of employees. For example, firms could increase the proportion of French Canadians working in operations in the province of Quebec outside of Montreal by moving English Canadians to other regions and replacing them by French Canadians moved from jobs in Montreal or elsewhere. The possible results of these changes are examined in this section.

There are, however, some larger questions regarding mobility of French- and English-speaking employees that must be considered first. The influences tending to reduce the mobility (or the willingness to move) of French Canadian employees are well known, and they were mentioned to us frequently in our interviews. They include social habits and preferences inherited from the "old" French Canada: the importance of family and community ties, and a tendency to put loyalty (or commitment) to the job second to loyalty to the family. These patterns of behaviour are, of course, not unique to French Canadians. In varying degrees they can be found in employees of all ethnic origins. But French Canadians are supposed to be more restricted by family and community ties, and part of our purpose here is to discover whether there are differences in their rate of mobility which could be taken as evidence of this.

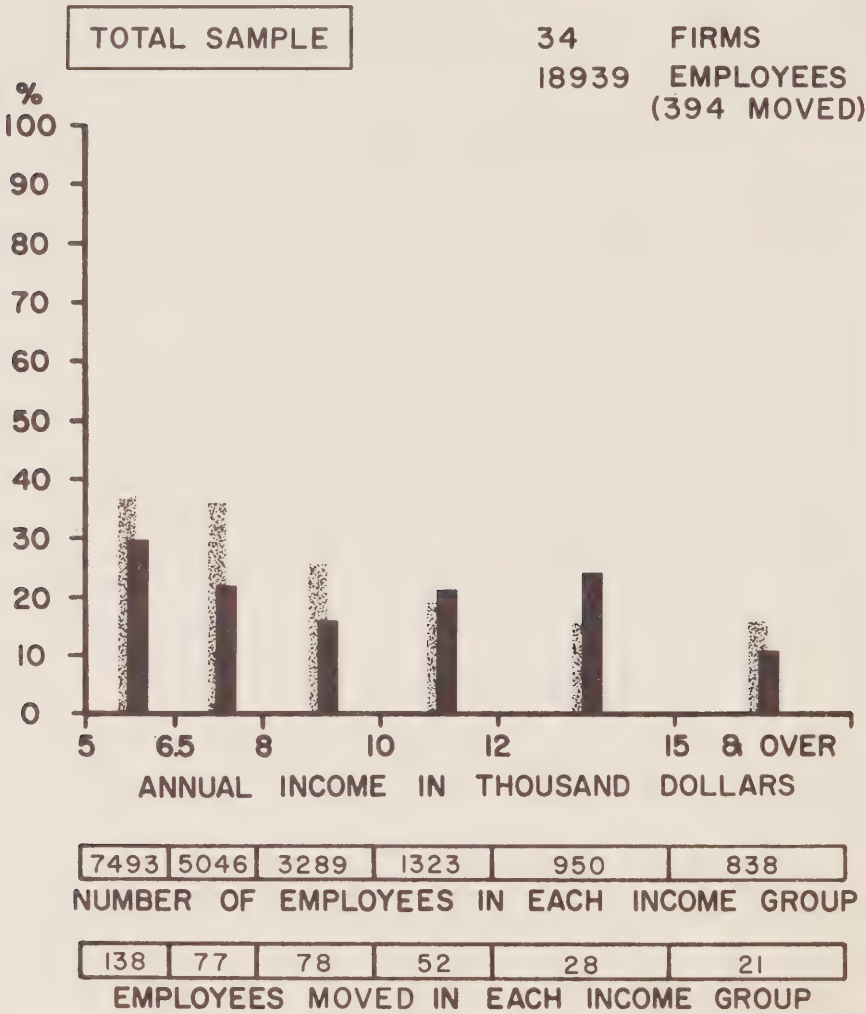
Beyond the general restraining influences mentioned, there are certain more direct factors that make it more difficult for a French Canadian to move to a job outside Quebec—especially if he is married and has children of school age. Chief among these is the fact that French-language (and, preferably, Roman Catholic) schools are difficult to find in other provinces. Where they do exist, they may be private, and schooling then involves an additional expense. In addition, the individual may wish to have his children grow up in a French-speaking environment, and this problem is only partly solved if a French-language school is available.

It may be possible to test for these factors. If French Canadians are as willing to move as anyone else, provided the schooling and environmental problems are solved, then their mobility between locations *within* the province of Quebec should be as high as the average. (It may be higher if, by contrast, non-French Canadians are being moved out of Quebec.) If not, then more general social restraints must be present.

There is one more factor which may be acting to reduce the current rate of mobility (as measured by actual movement) of French Canadians,

Figure VII.7

Relocation of salaried employees earning over \$5,000 per annum: Basic chart



Column chart shows percentage of French-speaking employees in each income group. The solid black column relates to employees recently relocated; the stippled column relates to total current employment.

and that is the attitude of employers. We learned in our interviews that, in many cases, senior executives of both French- and English-speaking companies are quite concerned about the reluctance of French Canadians to move to other company locations. No doubt this is based on past experience. To the greatest extent possible, the feelings and preferences of the employee are taken into account before he is asked to move. If it is felt that he would not be willing to relocate, then he is not asked; matters are seldom allowed to come to the crisis point. These considerations apply no matter what the ethnic background or mother tongue of the employee may be, but employers hesitate more and think more seriously about moving an employee if he is a French Canadian.

In the present section, the data deal with moves that actually took place. We have no way of measuring what might have been, although some of the intangible factors will be discussed later.

#### *A. The 34-Firm Sample*

Information on mobility was gathered from 34 of the 36 large firms analyzed in Chapter VI (Current Conditions). Although total employment of people earning over \$5,000 per annum in this sample is slightly less than in the sample relating to current employment (18,939 versus 19,888), the distribution of employees by salary level is still very close to that in the larger sample. The percentage of French Canadians in each income group never differs by more than one percentage point between the two samples.

#### *B. The Standard Chart*

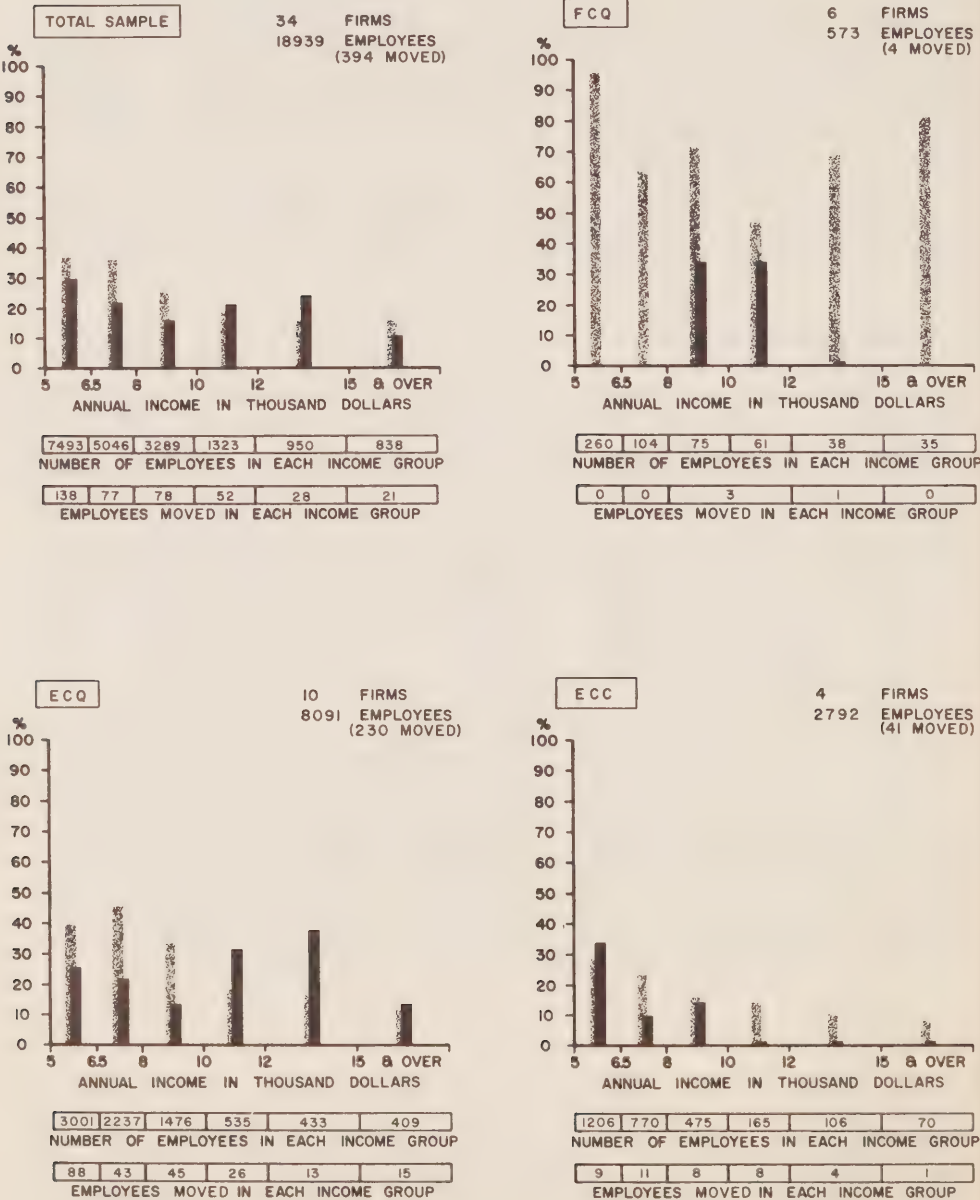
Figure VII.7 is constructed in a manner similar to that used in the two preceding sections, in order to facilitate comparison of the way in which practice varies by income level. The total number of people currently employed, and the number of people being relocated are shown in appropriate boxes at the bottom of the chart. As before, the charted lines show the percentage of French Canadians in each group. The pattern relating to current employment is shown by the stippled columns while the solid black columns show the pattern relating to relocated employees.

#### *C. Analysis of the Total Sample*

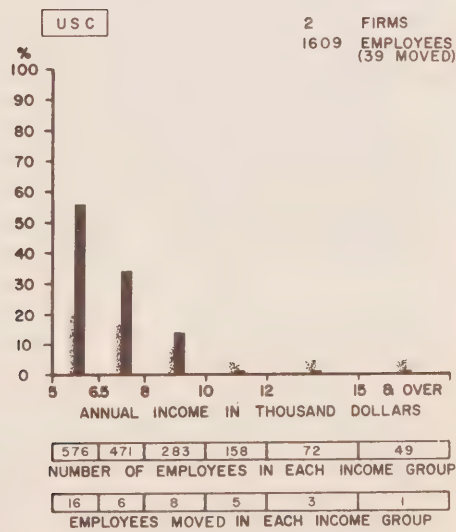
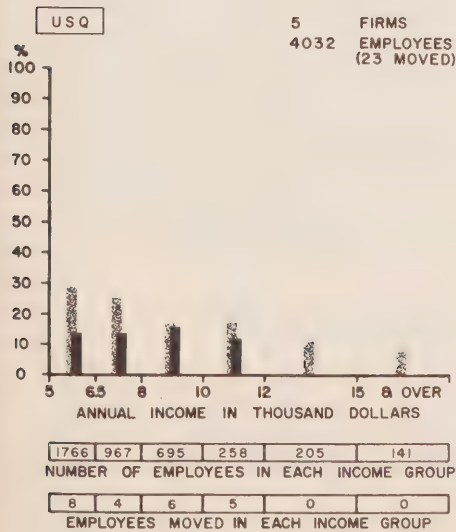
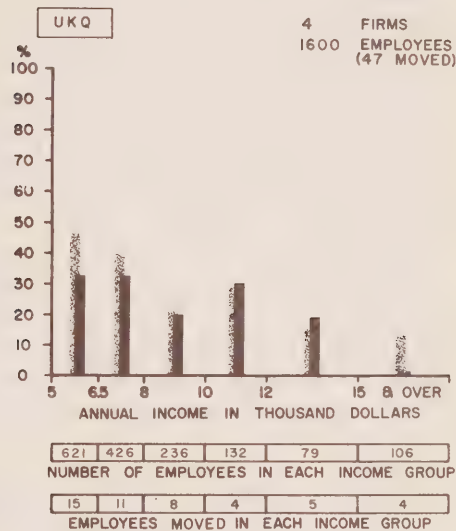
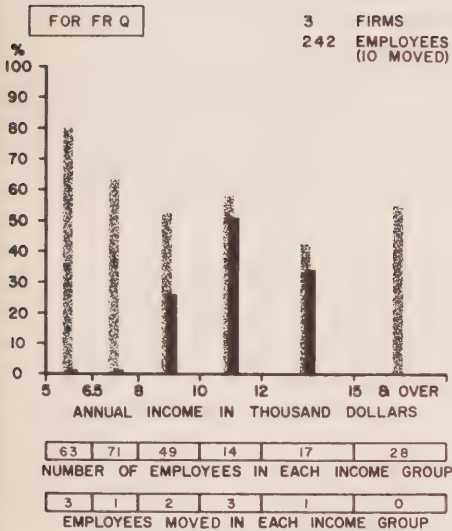
The numbers shown in the boxes entitled "Employees Moved in Each Income Group" are designed to measure mobility rate at each income level. They do not quite correspond to actual persons, for the number is calculated as the number of people moving out of each region, plus the number moving in, divided by two. Since a move often brings with it an increase in salary, a particular person may be counted



Figure VII.8  
Relocation of salaried employees earning over \$5,000 per annum: Differences due to ownership-location







among those moving out of one income group and also among those moving into another. As long as the numbers are large, the effect is not noticeable, but where they are small (as in FCQ and ForFrQ firms), the numbers are difficult to match with the "percentage French Canadian" line. In such cases, each series (number distribution and percentage French Canadian) should be considered separately, as being the fairest possible representation of each trend.

Figure VII.7 illustrates overall conditions of mobility in all sample firms between all regions. French Canadians constitute 31 per cent of employment in all salary groups, but only 23 per cent of all those moving. If the mobility of both French- and English-speaking employees were equal, we would expect the percentage figures to be equal also.

An interesting feature of the chart is that a hump is observable in middle income groups in the mobility curve, similar to that discovered in the curve for hiring. Apparently, French Canadians who are qualified for middle-management jobs are few but they are in relatively greater demand and are relatively more mobile than other French Canadians, or than English Canadians with equivalent qualifications.

Table VII.1 shows the pattern of movement of French- and English-speaking employees between regions. Movements away from each region are shown in the rows, and movements into each region are shown in the columns.<sup>2</sup>

As the total row and total column show, movements into and out of each region (with the minor exceptions of the four Western provinces and regions outside Canada) were quite balanced. Three interesting features stand out: (1) Most of the movement of French Canadians (77 cases out of 90) involved moves within the province of Quebec. (2) There was a net gain of 11 English Canadians (71 out, 82 in) in the Montreal region and a net loss of only one English Canadian (36 out, 35 in) from Quebec outside of Montreal. There appears to be no exodus. (3) Movements of French Canadians were exactly balanced in Montreal (35 out, 35 in) and in the rest of Quebec (42 out, 42 in). Thus, there appears to be no tendency on the part of firms in the sample to increase, through relocation, the percentage of French Canadians among their salaried employees in Quebec.

#### *D. Differences Due to Ownership-Location Group*

The data on Figure VII.8 (one chart for each ownership-location group) depict patterns of mobility of French- and English-speaking employees among all regions, and for all functional areas.

##### *1. FCQ and ForFrQ firms*

The data for FCQ and ForFrQ firms relate to such a small number of cases that detailed analysis is not possible. They do combine to



Table VII.2  
Inter-regional mobility (employees earning \$5,000 per annum and over)

Ownership-location group: FCQ; Function: All							
Source	Destination						
	Mother tongue	Metropolitan Montreal	Quebec excl. Montreal	Atlantic provinces	Ontario	Western provinces	Elsewhere
Metropolitan Montreal	E	-					-
	F	1					1
	T	1					1
Quebec excl. Montreal	E						
	F						
Atlantic provinces	E	1					1
	F	-					-
	T	1					1
Ontario	E						
	F						
Western provinces	E	1			1		2
	F	-			-		-
	T	1			1		2
Elsewhere	E						
	F						
Total in	E	1	1		1		3
	F	-	1		-		1
	T	1	2		1		4

show, however, that French Canadian employees of French-language firms are not highly mobile. In fact, of the 14 employees who moved, only three were French Canadians. We note also that the number of people moving as a percentage of total employment is very low in FCQ firms, although this is in part due to the small number of work areas operated by these firms.

As Tables VII.2 and VII.3 indicate, two people were moved into Quebec outside of Montreal—one French-speaking and one English-speaking—and one each into Montreal and Ontario, both English-speaking. No trends are apparent.

## 2. *ECQ firms*

ECQ firms account for 43 per cent of current employment in the sample and 58 per cent of all people moving. The hump in the mobility line, which occurs in the middle-income groups, is very striking in this case. The rate of movement of French Canadians in the top income group is equivalent to that of English Canadians, but at lower income levels (where nearly 80 per cent of all moves occur), the proportion of French Canadians among relocated employees is much lower than it is in total current employment.

Table VII.4 shows that there was a net gain of four French Canadians in Montreal (20 in, 16 out) and a net loss of three from the rest of Quebec (30 in, 33 out). Among English-speaking employees, there was a net gain of nine in Montreal (53 in, 44 out) and a loss of 10 from the rest of Quebec (20 in., 30 out). Thus, there is some evidence that the relocation policy described earlier is operating with this group of firms, at least. In Ontario, there was a net loss of one French Canadian (two in, three out) and a net gain of five English Canadians (73 in, 68 out). Of the 55 French Canadians moving, 50 moved into locations in the province of Quebec. The number of English Canadians moving into locations in Quebec (73) was the same as the number moving into Ontario, but most moves into Quebec were moves into the Montreal region.

## 3. *ECC firms*

The overall mobility rate in ECC firms is well below average (1.5 per cent of current employment, compared with 2.1 per cent in the sample as a whole). The percentage of French Canadians among those moving, which is also low at 12.2 per cent, is greater than the percentage of French Canadians currently employed in the first income group only, and it falls to zero at salaries over \$10,000 per annum.

As shown in Table VII.5, most movements involved the Ontario region, and there was a net loss of five English-speaking employees from Ontario (20 out, 15 in). At the same time, there was a net loss of one English Canadian from Montreal (five out, four in) and a net gain of five in the rest of Quebec (one out, six in). Movements of French-speaking employees were balanced at a very low level in Montreal, other Quebec and Ontario.



Table VII.3  
Inter-regional mobility (employees earning \$5,000 per annum and over)

Source	Ownership-location group: ForFrQ; Function: All						
	Destination						Total out
	Mother tongue	Metropolitan Montreal	Quebec excl. Montreal	Atlantic provinces	Ontario	Western provinces	Elsewhere
Metropolitan Montreal	E F T	- 1 1	1 - 1	1 - 1	1 - 1	1 - 1	2 1 3
Quebec excl. Montreal	E F T	- 1 1					- 1 1
Atlantic provinces	E F						1 1
Ontario	E F T	2 - 2					2 - 2
Western provinces	E F T	1 - 1			1 - 1	1 - 1	3 - 3
Elsewhere	E F T	1 - 1					1 - 1
Total in	E F T	4 1 5	- 1 1		2 - 2	2 - 2	8 2 10



#### 4. *UKQ firms*

The mobility rate in UKQ firms is higher than the overall average (2.9 per cent versus 2.1 per cent of total current employment). This is about as high as in ECQ firms. As shown in Figure VII.8 the proportion of French Canadians among those moving is very nearly the same as their proportion among salaried employees in the three middle income groups. It is somewhat lower in the first two income groups, and it falls to zero for people earning over \$15,000 per annum.

Table VII.6 shows that, of the 12 French Canadians who moved, 11 moved between regions in Quebec, with Montreal showing a net loss of four (9 out, five in) and the rest of Quebec a net gain of four (two out, six in). One French Canadian moved out of Ontario, and none moved in. Movement of English-speaking employees was balanced in Montreal (13 out, 13 in), while there was a net gain of six in other parts of Quebec (one out, seven in). This is the opposite of the experience of ECQ firms. Ten English Canadians moved out of Ontario, with three each going to Montreal, other parts of Quebec and the four Western provinces, while the five who moved into Ontario came from each of the five regions in Canada. There were no movements to or from areas outside Canada.

#### 5. *USQ firms*

The mobility rate of employees of USQ firms is very low, amounting to only 0.6 per cent of total current salaried employment. As Figure VII.8 shows, only a very slight hump is observable in the mobility curve, and French Canadians are under-represented in movements in all income groups.

As shown in Table VII.7, nearly half of all movements affected the four Western provinces. Of the 11 people moving away from locations in that region (all English-speaking), three went to Montreal, four to Ontario and four to other locations in the West. Two French-speaking employees moved into the Montreal area, one each from Ontario and Quebec excluding Montreal, and one French Canadian moved from Montreal to elsewhere in Quebec.

#### 6. *USC firms*

The mobility rate of employees of USC firms is relatively high (2.4 per cent) and the proportion of French Canadians among those moving is highest of any ownership-location group, at nearly 31 per cent. Figure VII.8 shows that all French Canadians who moved were in the first three income groups. It may be supposed that young French Canadians who choose to work for firms having their head offices outside Quebec would know beforehand that they would be expected to move to jobs in various locations, and they are likely to be among those who are more willing to move. Of the 12 French Canadians moving, four went to locations in Ontario, one to the Atlantic provinces, five to the Montreal area and two to other parts of Quebec.

Table VII.5  
Inter-regional mobility (employees earning \$5,000 per annum and over)

Source	Ownership-location group: ECC; Function: All						
	Destination						
	Mother tongue	Metropolitan Montreal	Quebec excl. Montreal	Atlantic provinces	Ontario	Western provinces	Elsewhere
							Total out
Metropolitan Montreal	E	-			3	2	5
	F	1			1	-	2
	T	1			4	2	7
Quebec excl. Montreal	E	-				1	1
	F	2				-	2
	T	2				1	3
Atlantic provinces	E		1	1			2
	F		-	-			-
	T		1	1			2
Ontario	E	3	5		7	3	20
	F	-	1		-	-	1
	T	3	6		7	3	21
Western provinces	E	1			5	1	8
	F	-			-	-	-
	T	1			5	1	8
Elsewhere	E						
	F						
Total in	E	4	6	1	15	7	36
	F	2	2	-	1	-	5
	T	6	8	1	16	7	41

Table VII.6  
Inter-regional mobility (employees earning \$5,000 per annum and over)

Source	Ownership-location group: UKQ; Function: All						
	Destination						Total out
	Mother tongue	Metropolitan Montreal	Quebec excl. Montreal	Atlantic provinces	Ontario	Western provinces	Elsewhere
Metropolitan Montreal	E	8	3	1	1	-	13
	F	4	4	-	-	1	9
	T	12	7	1	1	1	22
Quebec excl. Montreal	E	-	-		1		1
	F	1	1		-		2
	T	1	1		1		3
Atlantic provinces	E				1		1
	F				-		-
	T				1		1
Ontario	E	3	3		1	3	10
	F	-	1		-	-	1
	T	3	4		1	3	11
Western provinces	E	2	1		1	6	10
	F	-	-		-	-	-
	T	2	1		1	6	10
Elsewhere	E						
	F						
Total in	E	13	7	1	5	9	35
	F	5	6	-	-	1	12
	T	18	13	1	5	10	47



Table VII.7  
Inter-regional mobility (employees earning \$5,000 per annum and over)

Source	Ownership-location group: USQ; Function: All							
	Destination							
	Mother tongue	Metropolitan Montreal	Quebec excl. Montreal	Atlantic provinces	Ontario	Western provinces	Elsewhere	Total out
Metropolitan Montreal	E		1		1			2
	F		-		1			1
	T		1		2			3
Quebec excl. Montreal	E	-						-
	F	1						1
	T	1						1
Atlantic provinces	E							
	F							
	T							
Ontario	E	3			1	2	1	7
	F	1			-	-	-	1
	T	4			1	2	1	8
Western provinces	E	3			4	4		11
	F	-			-	-	-	-
	T	3			4	4	4	11
Elsewhere	E							
	F							
	T							
Total in	E	6	1		6	6	1	20
	F	2	-		1	-	-	3
	T	8	1		7	6	1	23

Table VII.8 shows that there was a pronounced migration of employees of USC firms towards Ontario; 19 of 39 moves were into that region. Of the 15 English Canadians involved, five came from Montreal, four from the rest of Quebec and four from the Western provinces. Overall, Ontario had a net gain of six English-speaking people (nine out, 15 in) and one French Canadian (three out, four in). Montreal had a net loss of four English Canadians (five out, one in), while the movement of French Canadians was balanced (five out, five in). In the rest of Quebec, there was a net loss of one French Canadian (three out, two in) and a net loss of four English Canadians, as none moved in.

### *E. Differences Due to Functional Area*

Differences in patterns of mobility which may be due to the functional area in which people are employed are examined in Figure VII.9. Because the numbers are small, only the three largest functional areas (manufacturing, marketing, and engineering and research and development) are considered.

#### *1. Manufacturing*

The mobility rate in manufacturing, at 1.7 per cent, is slightly lower than for the sample as a whole (2.1 per cent), and the proportion of French Canadians among those moving is also below average (20 per cent versus 23 per cent). However, the hump in the mobility curve is clearly evident, indicating that French Canadians at middle income groups are more mobile than French Canadians at other income levels, and they are involved in relatively more moves than English Canadians in the same middle income groups.

Table VII.9 indicates that 20 out of the 23 moves involving French Canadians were made within Quebec. Of these, 10 were made between locations in Quebec outside Montreal. In the Montreal area, movements of French Canadians in and out were in balance (six out, six in), and there was a net gain of one English Canadian (21 out, 22 in). There was a net loss of five English Canadians in other parts of Quebec (18 out, 13 in), while movements of French Canadians were in balance (14 out, 14 in). A total of 14 English Canadians (eight from Montreal) moved from locations in Quebec to Ontario, and 10 moved in the opposite direction (six to Montreal). In general, there seems to be a slight trend towards an increase in the proportion of French Canadians in plant management in Quebec outside of Montreal, but this is due principally to a net outward movement of English Canadians, as the movement of French Canadians was in balance.

#### *2. Marketing*

Having in mind the nature of work in the marketing function, and the importance of adjusting to environmental conditions, one might expect to find here a high mobility rate and, in particular,

Figure VII.9  
Relocation of salaried employees earning over \$5,000 per annum: Differences  
due to functional area

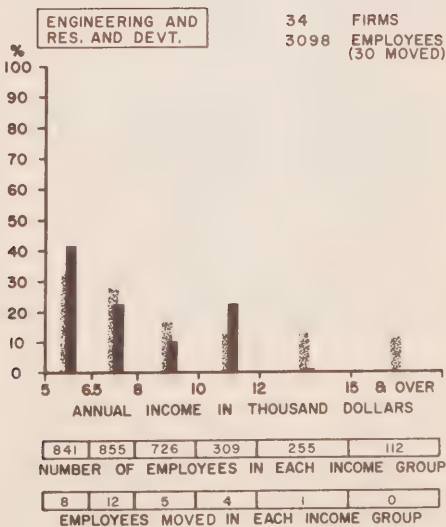
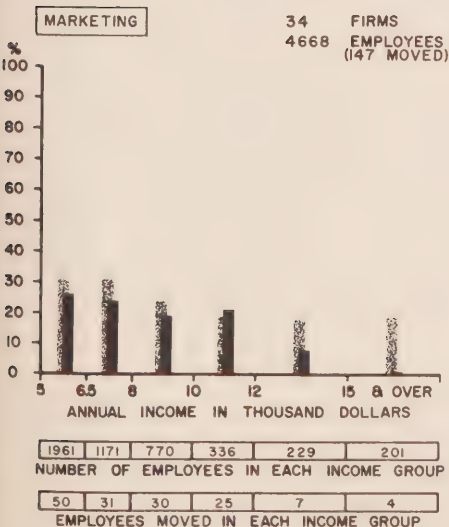
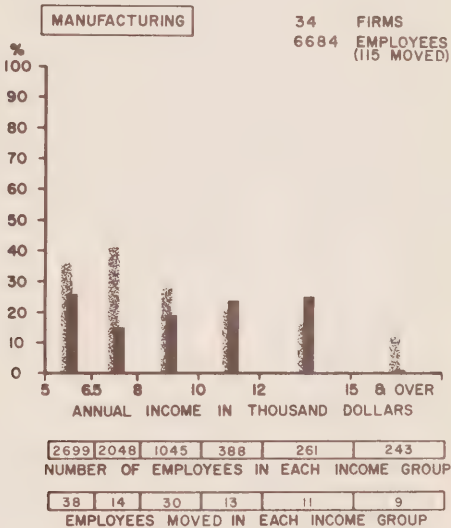
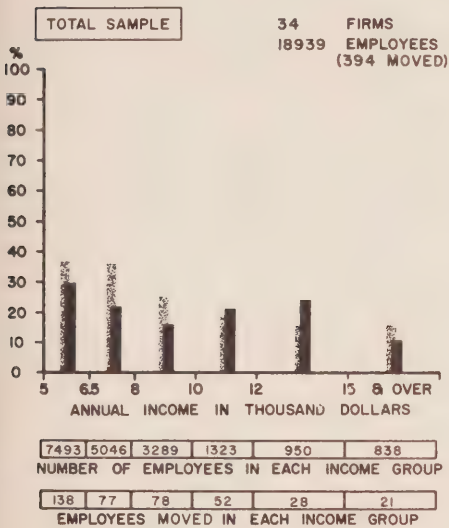


Table VII.8  
Inter-regional mobility (employees earning \$5,000 per annum and over)

Ownership-location group: USC; Function: All								
Source	Destination							
	Mother tongue	Metropolitan Montreal	Quebec excl. Montreal	Atlantic provinces	Ontario	Western provinces	Elsewhere	Total out
Metropolitan Montreal	E		-	-	5			5
	F		2	1	2			5
	T		2	1	7			10
Quebec excl. Montreal	E	-			4			4
	F	2			1			3
	T	2			5			7
Atlantic provinces	E	1						1
	F	1						1
	T	2						2
Ontario	E	-			-	4	5	9
	F	2			1	-	-	3
	T	2			1	4	5	12
Western provinces	E				4	1		5
	F				-	-		-
	T				4	1		5
Elsewhere	E				2	1		3
	F				-	-		-
	T				2	1		3
Total in	E	1	-	-	15	6	5	27
	F	5	2	1	4	-	-	12
	T	6	2	1	19	6	5	39

Table VII.9  
Inter-regional mobility (employees earning \$5,000 per annum and over)

Source	Ownership-location group: All; Function: Manufacturing					
	Destination			Total out		
	Mother tongue	Metropolitan Montreal	Quebec excl. Montreal	Atlantic provinces	Ontario	Western provinces Elsewhere
Metropolitan Montreal	E F T	5 1 6	5 3 8		8 1 9	2 1 3
Quebec excl. Montreal	E F T	5 4 9	4 10 14		6 - 6	3 - 3
Atlantic provinces	E F T	1 - 1				1 - 1
Ontario	E F T	6 1 7	4 - 4	2 - 2	21 - 21	2 1 3
Western provinces	E F T	5 - 5	- 1 1	1 - 1	4 - 4	6 - 6
Elsewhere	E F					
Total in	E F T	22 6 28	13 14 27	3 - 3	39 1 40	13 2 15
						4 - 4
						94 23 117



noticeable evidence of transfer of French Canadians to French-speaking regions.

In fact, the mobility rate in marketing, at 3.2 per cent, is well above the average rate of 2.1 per cent, but the proportion of French Canadians among those moving is slightly less than average (21 per cent versus 23 per cent). As Figure VII.9 shows, the mobility line lies below the datum line in all income groups but one, indicating that the percentage of French Canadians moving is less than their representation in salaried staff as a whole might indicate. The hump is barely apparent.

As indicated in Table VII.10, there was a relatively large net gain of 10 people in Quebec outside Montreal (20 in, 10 out), but this was made up of a net gain of seven English-speaking people (eight in, one out) and only three French-speaking (12 in, nine out). Movement in the Montreal region was balanced (39 out, 39 in), with a net gain of five English Canadians (28 in, 23 out) and a net loss of five French Canadians (11 in, 16 out). In Ontario, on the other hand, there was a net loss of six English Canadians (40 in, 46 out) and a net gain of two French Canadians (six in, four out). Net losses also occurred in the Atlantic provinces and the four Western provinces, but movement of French Canadians in these regions (one each) was balanced. On nearly every count, therefore, the figures contradict what we had expected.

### *3. Engineering and research and development*

Although the rate of mobility in engineering and research and development is low (less than 1 per cent), the proportion of French Canadians moving is higher than in either of the two functional areas considered earlier, and it is above the overall average as well (26 versus 23 per cent). The numbers are small, however, and it is difficult to generalize.

The percentage of French Canadians among those moving is greater than their proportion in total salaried employment in the lowest income group at midrange. These two income groups comprise about half of all people moving.

Table VII.11 shows that movements were generally balanced regionally, with perhaps a slight drift from Ontario to Quebec. In Montreal, there was a net gain of three English Canadians (four out, seven in) and a net loss of one French Canadian (two out, one in). In other areas of Quebec, there was a net loss of one English Canadian (six out, five in) and a net gain of two French Canadians (four out, six in). One French Canadian moved from Ontario to Quebec excluding Montreal, and none moved into Ontario. One French Canadian moved from the Western provinces to Quebec excluding Montreal and one moved in the opposite direction. In general, there seems to be no trend that would change the proportions of French and English Canadians working in the various regions.

Table VII.10  
Inter-regional mobility (employees earning \$5,000 per annum and over)

Source	Ownership-location group: All; Function: Marketing						
	Destination						Total out
Mother tongue	Metropolitan Montreal	Quebec excl. Montreal	Atlantic provinces	Ontario	Western provinces	Elsewhere	
Metropolitan Montreal	E F T	- 2 2	4 8 12	4 1 5	11 4 15	4 1 5	23 16 39
Quebec excl. Montreal	E F T	1 5 6	- 3 3	- 1 1	- 1 1	- 1 1	1 9 10
Atlantic provinces	E F T	2 1 3	2 - 2	2 - 2	3 - 3	- - -	9 1 10
Ontario	E F T	17 3 20	1 - 1	1 - 1	13 1 14	10 - 10	46 4 50
Western provinces	E F T	8 - 8	1 1 2	- 1 -	12 - 12	15 - 15	36 1 37
Elsewhere	E F T	- - -	- - -	- - -	1 - 1	1 - 1	2 - 2
Total in	E F T	28 11 39	8 12 20	7 1 8	40 6 46	30 1 31	117 31 148

## Total VII.11

Inter-regional mobility (employees earning \$5,000 per annum and over)

Source	Ownership-location group: All; Function: Engineering and research and development								
	Destination								
	Mother tongue	Metropolitan Montreal	Quebec excl. Montreal	Atlantic provinces	Ontario	Western provinces	Elsewhere	Total out	
Metropolitan Montreal	E	2	1		1	-		4	
	F	-	1		-	1		2	
	T	2	2		1	1		6	
Quebec excl. Montreal	E	1	3		1	1		6	
	F	1	3		-	-		4	
	T	2	6		1	1		10	
Atlantic provinces	E	1		1				2	
	F	-		-				-	
	T	1		1				2	
Ontario	E	2	1		4	1	1	9	
	F	-	1		-	-	-	1	
	T	2	2		4	1	1	10	
Western provinces	E	1	-					1	
	F	-	1					1	
	T	1	1					2	
Elsewhere	E				1			1	
	F				-			-	
	T				1			1	
Total in	E	7	5	1	7	2	1	23	
	F	1	6	-	-	1	-	8	
	T	8	11	1	7	3	1	31	

### *F. Mobility within Bilingual-Bicultural Regions*

It was mentioned earlier that there may be some institutional and environmental factors in regions of Canada outside Quebec which would discourage a French Canadian from moving to jobs in such locations. The analysis given in the previous section indicated that some movement of French Canadians to locations outside Quebec does occur, but the number of cases is very small. The total number of French Canadians moving was 90, and of these, 77 moved to locations in the province of Quebec.

Beyond this, however, is the question whether French Canadians are less willing to move than English Canadians even when institutional factors, such as the availability of French-language schools for their children, are not a problem. A rough answer can be obtained by considering only moves within the province of Quebec. This would include all moves by employees of regional firms, and only those moves by employees of national firms within metropolitan Montreal and the rest of Quebec. Table VII.12 shows the data on such moves, together with data on total movement to all regions by employees of national firms, for purposes of comparison. Overall totals are also shown.

The proportion of French Canadians among all people moving into locations in the province of Quebec is well above the average for all regions in national firms as well as in regional firms. However, this could be expected, since the proportion of French Canadians in the total work force is higher in Quebec than elsewhere. A better measure is the mobility rate, that is, the number of employees moving expressed as a percentage of total employment. With this measure, differing proportions of representation cancel out. The overall mobility rate is 2.1 per cent, and the mobility rate between all regions for French Canadians is about three-quarters of this or 1.6 per cent.

Interestingly, the mobility rate for French Canadians *within* Quebec is slightly lower still, at 1.4 per cent for both regional and national firms. In regional firms, however, the mobility of English-speaking employees is less than it is for French-speaking (1.1 per cent versus 1.4 per cent), no doubt because FCQ and ForFrQ firms constitute a significantly large part of this group, and many English-speaking people are employed at head offices, rather than at various locations in the province. The opposite is true for movements within Quebec by employees of national firms (many of which have their head offices outside Quebec). Here, the mobility rate for English Canadians is over twice as great as it is for French Canadians (3.1 per cent versus 1.4 per cent). The mobility rate for English Canadians in Quebec, taking both national and regional firms together, is 2.1 per cent, slightly less than the average in all regions, which is 2.4 per cent. Thus, both English- and French-speaking employees tend to move less in Quebec than elsewhere, though English-speaking people

Table VII.12

Employee mobility in regional and national firms (employees earning \$5,000 per annum and over)

		Regional firms	National firms		All firms
			All regions	Montreal and other Quebec only	All regions
Employees moved	E	32	277	91	309
	F	24	66	54	90
	T	56	343	145	399
Total employees	E	2,851	10,309	2,967	13,160
	F	1,665	4,114	3,846	5,779
	T	4,516	14,423	6,813	18,939
		%	%	%	%
Mobility rate (Empl. moved/Total)	E	1.1	2.7	3.1	2.4
	F	1.4	1.6	1.4	1.6
	T	1.2	2.4	2.1	2.1

move at a rate which is half again as great as the rate for their French-speaking colleagues.

#### *G. Effect of Age, Marital Status and Family Size*

Table VII.13 gives the distribution by age, marital status and family size of both English and French Canadians involved in moves between all regions. The distribution relating to total movement is quite flat in the midrange of age for both French- and English-speaking employees, with barely significant modal points occurring in both cases at ages 30-34 and 40-49. In both cases, also, movement of employees 50 years of age and over accounts for nearly 10 per cent of the total. It is in the lower age groups that differences begin to become apparent, as movements of French Canadians between the ages of 20 and 24 account for 10 per cent of all moves, while for English Canadians the proportion is only 1.6 per cent. This may be due in part to a changing attitude toward mobility among younger French Canadians, but we note also that this is the age at which a smaller proportion of men are married. Their children, if they have any, are probably young enough that schooling is not yet a problem.

The main conclusion that emerges from a comparison of these two distributions, however, is not the difference in this relatively small area, but the similarity. The percentage of single men among



Table VII.13  
Distribution of relocated employees by age, marital status and family size

	Age group							Total
	20-24	25-29	30-34	35-39	40-49	50 & over	Not known	
<u>French-speaking employees</u>								
Single	5	4	3	1	-	-	2	15
Married, no children	3	7	1	1	4	1	2	19
Married, with children	1	7	15	11	12	7	1	54
Average no. of children	2.0	1.7	2.2	2.3	3.2	2.0	2.0	2.3
Total*	9	18	19	13	16	8	7	90
<u>English-speaking employees</u>								
Single	3	15	7	3	1	1	15	45
Married, no children	2	14	6	4	7	7	19	59
Married, with children	-	20	40	45	46	22	18	191
Average no. of children	0.0	1.7	2.2	2.7	2.5	3.1	2.3	2.5
Total*	5	50	53	52	55	30	64	309

\*In some cases, the sum of the figures in a column is not equal to the total shown, due to lack of information regarding marital status.

French Canadians who are moving is only slightly greater than it is among English Canadians, although the number of men without children is proportionately higher among French Canadians (49 per cent versus 34). Those French Canadians with children who do move tend to have slightly smaller families than English Canadians (2.3 children versus 2.5), and we would guess that this size of family is smaller than the average for French Canadians at equivalent levels of income. Among the people who move, the tendency of English Canadians to have slightly larger families than French Canadians is observable in every region, including Quebec outside of Montreal, where average family sizes are 2.9 and 2.5, respectively.

*A. Introduction and Summary*

The pattern of employment of salaried staff is evidently determined, to an extent, by where companies look for candidates. Employees entering at middle and upper income levels often come from other firms, either directly or through placement agencies. For these people, the avenues are many and varied, and consistent information on hiring practices could not be obtained from sample firms. However, a high proportion of people entering at the two lowest income groups (between \$5,000 and \$8,000 per annum) are hired directly after they graduate from university. Hiring practices regarding those new employees who graduated from Canadian universities are examined in the present chapter.

In the earlier discussion on recent hiring practices (Chapter VII), it was discovered that the proportion of French Canadians among all new employees entering the two lowest income groups is significantly less than the proportion currently employed. At the same time, we know that many more French Canadian university graduates in those disciplines logically related to business have become available in the last five years or so, while concurrent studies<sup>1</sup> show that the demand for these people is so high that French Canadians can now demand, and receive, a salary premium. Thus, if large manufacturing firms are not able to maintain a proportionate share of French Canadians among their recently-hired employees, it must be because they are not trying hard enough to hire them, or they are being outbid by other employers.

In our questionnaire (*see* Appendix), the 29 major Canadian universities (three French-language, two bilingual and 24 English-language) were designated, and sample firms were asked to show, for each university: (1) whether hiring teams visited the university; (2) the number of offers of employment that were made to students graduating in engineering and commerce;<sup>2</sup> and (3) the number of people in each

discipline hired by the firm. The results, based on replies from 41 sample firms, are shown in the accompanying tables.

In Tables VIII.1 and VIII.2, the number of "visits" is the product of the number of universities in each region (shown at the top of each column) times the number of firms sending interviewing teams to those universities. The maximum possible number of visits to universities in each region would be equal to the total number of firms visiting (shown in the upper part of the table) times the number of universities. Thus, the number of visits actually made is an index of the degree of interest shown by sample firms in the universities concerned. It will give us some measure, for example, of the attention paid by English-language firms to recent graduates of French-language universities, and vice versa. The response of recent graduates is given by the "success ratio," which is equal to the number of people hired divided by the number of job offers made. This latter measure is, of course, also conditioned to some extent by the amount of prior preparation by potential employers and the expectation of success that they require before making an offer. We shall have to assume that this is substantially the same for all firms. Finally, the figures should also give us an indication of the degree to which firms restrict their search for new employees to universities in their own areas.

### *B. Graduates in Engineering*

Table VIII.1 shows the situation with respect to engineering graduates hired by all the sample firms. The total number of firms sending teams to interview graduating engineers (22 out of 41) is quite small, and it is smaller still in the case of other disciplines. Apparently, a significant proportion of Canadian manufacturing firms follow the practice (reported to us in two or three cases during our interviews) of welcoming any applicant who comes to them, although they do not go to universities to search them out. The effect of such a practice is to discourage a recent graduate from applying for a job in a firm where, among other things, the language of ownership is not the same as his own. This is especially true in the case of French Canadians who now have ample job opportunities offered to them before they have completed their studies.

Of the 22 firms sending interviewing teams to universities, 10 are ECQ, six are USQ, three are UKQ, two are USC and one is ECC. No FCQ or ForFrQ firms reported visits.

A total of 199 engineering graduates are reported as having been hired. Forty-five of these, or about 23 per cent, are graduates from French-language universities. Since between 10 and 15 per cent of engineering graduates from McGill University are French Canadian, we could add another two or three to this number, plus one or two graduates from the two "bilingual" universities, to obtain the total number of French Canadians (about 49, or 25 per cent).

Table VIII.1  
Hiring practices: Graduates in engineering (total number of firms covered: 41; number of firms  
visiting universities: 22)

French-language universities			Bilingual universities		English-language universities					
Region	Montreal	Quebec	Total	Ontario	Montreal	Quebec	Atlantic	Ontario	West	Total
No. of universities	1	2	3	2	3	1	8	8	4	24
Visits	17	22	39	6	19	-	20	66	31	136
Offers	67	65	132	4	68	-	100	215	191	574
Hired	32	13	45	2	21	-	20	46	65	152
Success ratio	0.48	0.20	0.34	0.50	0.30	-	0.20	0.21	0.34	0.26



The total number of visits to French-language universities was 39, of which 18 were by ECQ firms, 10 by USQ firms, and five each by UKQ and USC firms. The success ratio of all these firms was about the same, just over one in three, and they appear to have done much better at the University of Montreal than at Laval and Sherbrooke.

The total number of visits to English-language universities (136) was three and one-half times as great as the number of visits to French-language universities but there are eight times as many English-language universities (24 versus three). The total number of job offers made, 574, was over four times as great as the number made at French-language universities (132), but the number hired at English-language universities, 152, is only three and one-half times as great as the French (45). The success ratio was consequently much lower for English-language universities, 0.26 versus 0.34. Greatest success was obtained at universities in the four Western provinces and in Montreal (McGill University is the only one represented here, since the other two English-language universities have not as yet graduated any engineers).

There seems to be little tendency for firms of any ownership-location group to restrict their visits to nearby universities, although the number of visits to the Atlantic provinces by all firms is less than proportionate.

We had expected to find, on the basis of opinions given to us during our interviews, that the success ratio of firms with their head offices in Quebec would be quite low at universities in Ontario and the Western provinces, especially at the former. The success ratio at Ontario universities is generally low in all cases, but for ECQ, UKQ and USQ firms, (that is, those based in Quebec) the ratios are 0.17, 0.39 and 0.20, respectively, while for ECC and USC firms (based outside Quebec) the ratios are lower still, 0.11 and 0.13. It may be that the majority of recent graduates of Ontario universities hired by Quebec-based firms are not working in Quebec, but this is doubtful.

In the case of engineering graduates of French-language universities, the success ratio of Quebec-based firms is, as expected, somewhat greater than that of others. Also, because of our sampling criteria, the probability is much greater that most of the recent French Canadian graduates working in all sample firms are located in Quebec. For ECC and USC firms, the success ratios are 0.33 and 0.35, respectively, while for ECQ, UKQ and USQ firms, the ratio is 0.37 in each case.

### *C. Graduates in Commerce*

The number of firms visiting universities to hire commerce graduates is slightly smaller than it is for engineering graduates, and the number of job offers is substantially less. Overall, the number

Table VIII.2  
Hiring practices: Graduates in commerce (total number of firms covered: 41; number of firms  
visiting universities: 17)

French-language universities			Bilingual universities		English-language universities					
Region	Montreal	Quebec	Total	Ontario	Montreal	Quebec	Atlantic	Ontario	West	Total
No. of universities	1	2	3	2	3	1	8	8	4	24
Visits	10	20	30	5	22	3	22	40	26	113
Offers	16	27	43	6	22	2	19	32	37	112
Hired	7	14	21	2	13	1	10	14	17	55
Success ratio	0.44	0.52	0.49	0.33	0.59	0.50	0.53	0.44	0.46	0.49

of visits per university to French-language universities is about twice that to English-language universities, and about the same for commerce as for engineering. The data are shown in Table VIII.2.

The success ratio for all French-language universities is 0.49 for graduates in commerce, compared to 0.34 for engineering graduates, owing mainly to a higher ratio of success at Laval and Sherbrooke. The success ratio for commerce graduates from English-language universities in all regions is higher than it was for engineering graduates. It is still lowest for Ontario universities, although the range here is quite small. Overall, the success ratio for commerce graduates is 0.49 compared to 0.26 for engineering.

No FCQ or ForFrQ firms reported sending teams to interview graduating students at their universities. Of the 17 firms which did, eight are ECQ, four are USQ, two are UKQ, two are USC, and one is ECC. Here, also, there is little evidence that firms in any ownership-location group tend to restrict their hiring efforts to universities near their head offices. In fact, the largest group of new employees (17) came from universities in the four Western provinces as did engineering graduates as well.

There was a slight tendency for graduates of Ontario and Western universities to prefer firms having their head offices in Canada outside Quebec. ECC and USC firms made 16 job offers to graduates of Ontario universities and had nine accepted, while ECQ, UKQ and USQ firms also made the same number of job offers (16) and had six accepted. Similarly, USC firms made 18 job offers to graduates of Western universities and had 10 accepted, while ECQ, UKQ and USQ firms made 19 job offers, and had seven accepted.

Of the 21 commerce graduates of French-language universities accepting job offers from firms in our sample, 17 went to firms having their head offices in Quebec. However, the success ratio of the two firms based elsewhere in Canada (both USC) which did make job offers is above average, at 0.67. (The average for all firms in French-language universities is 0.49).

The tables in this chapter show that sample firms are not neglecting the French-language universities in their search for new employees. In fact, the average number of firms looking for engineering and commerce graduates in each French-language university (23) is more than double the average number of firms visiting each English-language university (10).

In searching for an answer to this paradox, we must bear in mind that we are looking at the older, well-established companies which have been in business for some time. Their employment of French Canadians in all income groups seems to be in line with the number available.<sup>3</sup> What these firms may now be attempting to do, in response to social pressures, is to increase the proportion, and this is where they are encountering difficulties. The influence of recent

demand from the Quebec provincial government and its agencies has already been noted. In addition, there are many smaller firms and many new firms which have never been concerned with their social image in Quebec before. The demand from all these sources, reflected in salary premiums, is evidently greater than the number of qualified French Canadians available.





### *A. The Importance of Continuing Education*

Rapid changes in technology, and the need to develop managerial and supervisory skills, make it necessary for both companies and their employees to devote a great deal of expense and energy to further education. In many industrial companies, such activity has come to be regarded as part of the cost of operations, and there is general agreement that these costs, already high, will continue to grow at an increasing rate. Among most employees above the ranks of unskilled labour, also, there is growing recognition of the fact that their education does not stop upon graduation from school or university, but that it is becoming an integral part of their job responsibilities.

Recognition of the importance of education and training is not yet widespread, although it appears that the larger the firm, the greater is the effort devoted to these ends. Our sample, which is restricted to large manufacturing firms, is therefore biased to some extent. Even so, of the 41 firms in the sample, only 32 are engaged in one way or another in further education. Of these, 24 conduct courses within the firm as well as offering assistance to employees who are taking evening and extension courses at universities, technical schools and other institutions. The degree of commitment is quite striking; as later tables will show in greater detail, firms in the sample are currently devoting over one million dollars a year, in direct costs alone, to education. In addition, nearly 100,000 man-days per year are being spent by employees taking courses inside and outside their companies.

From the point of view of bilingualism and biculturalism, continuing education is of interest in two ways. First, there is the impact on the employee of the language in which courses are given, and the requirements of bilingual ability that they may entail. If an employee is unable to understand the language used in instruction, his

usefulness to the firm is greatly diminished, and his chances of promotion are put in jeopardy. Second, there is the expense, in terms of employees' time as well as money, incurred by the firm for instruction in another language. This is an element of cost which is peculiar to firms operating in bilingual areas and it puts them at a cost disadvantage, however slight, with respect to rival firms operating in unilingual areas. The alternative of ignoring language differences between employees may be even more costly, however, because adequate and clear communication within the firm is necessary, and because the morale and efficiency of employees is important.

Until recently, most French-speaking employees of large manufacturing firms were at the wage-roll level. The small number who held technical or staff positions were usually greatly outnumbered by their English-speaking colleagues and, working in an English-speaking environment, they soon became fluent in English, if they were not so already. Bilingual ability was necessary only where wage-roll and staff employees came into contact, usually at the foreman or shop supervisor level. There was thus established a "bilingual belt," with predominantly English- and French-speaking areas on either side of it.

These conditions are still to be found in many firms in Quebec today, but the bilingual belt is either widening or breaking apart altogether. Most firms in Quebec, as they react to changing social and governmental attitudes, and as they find an increasing number of qualified French Canadians available for staff and supervisory positions, are hastening to improve the bilingual ability of their staff employees, especially those who are English-speaking. Accordingly, substantial amounts of money are now being spent on French-language instruction both on and off the job. Of the one million dollars being spent on education, nearly one-quarter (\$240,000) is being devoted to language courses.

#### *B. Direct Costs Incurred*

Table IX.1 shows the direct costs incurred yearly for the training and further education of employees by firms of each ownership-location group. Separate columns show the cost of courses given inside the firm and those given outside. In each case, the cost of language courses is shown separately from the cost of all other courses.

Courses given within the firm are defined as those which the firm gives to its own employees, whether held on its own premises or elsewhere, but they exclude training in specific tasks or duties given on the job by foremen and others to new wage-roll employees. Only direct costs, which exclude the value of the employees' time spent away from the job, are considered.

Courses given outside the firm principally comprise evening and extension courses offered by universities, technical schools or other

Table IX.1  
Training and further education of employees: Direct costs incurred (during the 12-month period ended 30 June, 1964)

Ownership- location group	Courses given within the firm			Courses given outside the firm*			Total all courses		
	All		Total	All		Total	All		Total
	Language	others		Language	others		Language	others	
	\$	\$	\$	\$	\$	\$	\$	%	\$
FCQ	225	3,200	3,425	390	4,300	4,690	615	7.6	7,500
ECQ	103,314	297,752	401,066	20,499	56,533	77,032	123,813	25.9	354,285
ECC	8,280	17,550	25,830	4,268	23,677	27,945	12,548	23.3	41,227
ForFrQ	-	-	-	75	500	575	75	13.0	500
UKQ	14,140	13,895	28,035	2,227	15,024	17,251	16,367	36.2	28,919
USQ	65,410	233,376	298,786	5,022	41,303	46,325	70,432	20.4	274,679
USC	8,700	54,050	62,750	7,150	25,300	32,450	15,850	16.6	79,350
Total	200,069	619,823	819,892	39,631	166,637	206,268	239,700	23.4	786,460
								76.6	1,026,160

\*Including financial assistance given to employees taking evening and extension courses.

institutions to anyone, regardless of his place of employment. In this case, direct costs incurred by the firm mainly represent the amount of financial assistance given to employees who take such courses.

As the "total" columns at the right-hand side of the table show, firms in the sample spent \$1,026,160 (direct cost only) on training and education during the 12-month period ended 30 June, 1964. Of this amount, \$239,700 or 23.4 per cent, represented the cost of courses in language. Virtually all of this was for courses in French for English-speaking employees.

Almost half (46.6 per cent) of total expenditure, and over half (51.6 per cent) of the expenditure for language courses, was incurred by ECQ firms. USQ firms spent the next highest amount (33.6 per cent of the total), although the proportion devoted to language courses was lower than for ECQ firms (20.4 per cent versus 25.9 per cent). The largest proportion of expenditure on language courses (36.2 per cent) was spent by UKQ firms, while the lowest (7.6 per cent) was among FCQ firms. The two groups of firms in which the language of ownership is French (FCQ and ForFrQ) together spent a very small amount of money on language courses: \$690, or less than 0.3 per cent of all the money paid out for language instruction. In these cases, courses would be in both French and English, but the scant attention paid to them cannot be taken as an indication of indifference. Recalling the high degree of bilingual ability already possessed by employees of these firms (shown in Chapter VI), we must conclude that, in the main, language courses are simply not necessary. What is noticeable, however, is the small amount of money spent by these firms on education and training of all kinds, and that firms in these two groups are the only ones which spend more money for courses given outside the firm than inside. The latter point is partly explained by the fact that these firms are, on the whole, smaller than firms in other ownership-location groups, and that the smaller number of employees involved makes it more difficult, and relatively more expensive, to operate private courses.

Although these figures give a good idea of the total amount of money being spent on education and the way in which expenditures and emphasis are distributed, comparison between ownership-location groups is difficult because the number of firms in each group differs widely. There are, for example, 10 ECQ firms represented in the table, and only one ForFrQ firm. In order to obtain a better comparison, Table IX.2 shows the breakdown of the total direct costs for each ownership-location group, expressed as an average per firm (taking only those firms which do give courses or course assistance).

USQ firms incur the highest total direct costs for training and education, on a per-firm basis, followed by ECQ, USC, UKQ, ECC, FCQ and ForFrQ firms, in that order. The range is very great, from \$56,320 to \$575. Expenditures on language courses follow a somewhat different order, with ECQ firms first, followed by USQ, UKQ, USC,

ECC, FCQ and ForFrQ. Here, English-language firms with head offices in Quebec lead the list.

Direct costs incurred in all other courses (which amount, on the average, to over 76 per cent of the total) give a good indication of the concern shown by firms in the group for technological change and new supervisory techniques.

Table IX.2

Training and further education of employees: Direct costs incurred (during the 12-month period ended 30 June, 1964)

Ownership- location group	Average cost per firm*		
	Language courses	All other courses	Total
FCQ	\$ 205	\$ 2,500	\$ 2,705
ECQ	12,190	34,910	47,100
ECC	4,180	13,750	17,930
ForFrQ	75	500	575
UKQ	7,630	10,710	18,340
USQ	11,620	44,700	56,320
USC	6,730	35,460	42,190
Average, all firms	\$ 8,950	\$29,000	\$37,950

\*Considering only those firms which do give courses or course assistance.

### *C. Employees' Time Devoted to Training and Continuing Education*

The amount of effort devoted to training and educational programmes may also be measured by the amount of employees' time that they involve. Tables IX.3 and IX.4 show the number of man-days devoted to courses given inside and outside the firm, respectively. Table IX.3 shows the breakdown by course description, language of instruction, mother tongue of the employees and the ownership-location group of firms.

As the total figures indicate, nearly twice as much effort (measured in man-days) is devoted to courses of all kinds given in French (53,315) as in English (27,578). However, these figures must be used with care, for of the total number of man-days given over to instruction in French, over half (28,236 or 53 per cent) represents French-language instruction given to English-speaking employees.

The sensitivity of firms to the need to promote bilingual ability among their employees is indicated by the figures relating to language instruction. Language courses given in French to French-



Table IX.3  
Training and further education of employees: Courses given within the firm (man-days)

All firms		Courses given in English to:		Courses given in French to:	
Course Description		English-speaking employees	French-speaking employees	English-speaking employees	French-speaking employees
Language: French		-	-	28,236	1,147
: English		112	8,375	-	-
Management and supervision		6,323	968	39	4,924
Technical and process operation		6,743	1,091	195	15,774
Marketing		1,161	367	-	10
Finance and accounting		273	37	-	-
Other		2,053	75	4	2,986
Total man-days		16,665	10,913	28,474	24,841
Ownership- location group					
	Firms in sample	Firms giving courses			
FCQ	6	2			137
ECQ	13	11			23,798
ECC	4	2			10
ForFrQ	3	0			-
UKQ	5	2			-
USQ	7	5			802
USC	3	2			94
Total	41	24			24,841
Grand total man-days, courses given:			in English, 27,578	28,474	in French, 53,315

speaking employees, and those given in English to English-speaking employees, no doubt comprise subject areas such as technical report writing, and may be ignored in the present context.<sup>1</sup> Looking at the relatively heavy emphasis placed on French-language instruction for English-speaking employees, we are, perhaps, not too surprised. What is surprising, however, is the amount of effort devoted to teaching English to French-speaking employees, especially in ECQ firms. The total number of man-days involved (8,375) is just over 22 per cent of the total devoted to all language courses. This would seem to offer evidence, not only of the increasing degree of bilingualism among sample firms, but also that a French Canadian is no longer barred from employment if he cannot already speak English. Like his English-speaking counterpart, however, he must expect to have to learn the other language in order to ensure continuing advancement in the firm.

ECQ firms are by far the most active in this field. Of the 8,375 man-days devoted to English-language instruction for French-speaking employees, 7,640 are in ECQ firms. (This detail is not given in Table IX.3.) The remainder is contributed by ECC firms (448 man-days) and USQ firms (287 man-days). ECQ firms also account for 20,901 of the total 28,474 man-days given over to courses in French for English-speaking employees. In other ownership-location groups, the comparable figures are: 4,120 in USQ, 2,254 in UKQ, 1,074 in ECC and 125 in USC. The two remaining groups of firms, FCQ and ForFrQ, do not give language courses within the firm. ForFrQ firms offer some assistance for outside courses in English for French-speaking employees, but the total amount of time spent on those courses was only seven man-days during the sample period.

The impact of training and educational programmes on employees may best be seen in the figures relating to courses other than language. These show the relative emphasis placed on further training in various functional areas, as well as the way in which training effort is distributed between French- and English-speaking employees. We note, for example, that English-speaking employees spend a slightly greater number of man-days taking courses in management and supervisory techniques than do French-speaking employees (6,362 versus 5,892 man-days). Having in mind the higher proportion of English-speaking people in staff and supervisory positions, however, we can see that a relatively greater emphasis is being given to training French-speaking employees. In fact, the 31 per cent of the salaried employees in our sample who are French Canadian, account for nearly half of the man-days spent in courses in management and supervision.

In the areas of marketing and finance and accounting, the proportional split of man-days between English- and French-speaking employees is more nearly equal to the proportions of each currently employed in those functions.

Courses in process operation and other technical fields include a greater number of training programmes for skilled and semi-skilled workers. Most people working at these positions in plants in Quebec

are French Canadian, and the high proportion of such courses given to these employees is not surprising. Nearly all of the man-days involved (15,255 out of the total 15,774) are accounted for by ECQ firms. We learned during our interviews that some of these firms often have to operate quite extensive training programmes at an elementary level in their plants in Quebec outside Montreal, where the educational level of incoming employees is very low.

The language used for instruction is a reflection of the bilingual ability demanded of employees, and it constitutes an important element in determining the degree to which employees must adapt to the language patterns used in the workplace, or vice versa.

Apart from language courses, instruction is given in French to English-speaking employees in a very few cases, by ECQ firms only. French-speaking employees take instruction in English in nearly all kinds of courses, but for training in supervisory techniques and process operation, they spend a much greater proportion of their working days taking courses in French. In marketing and finance and accounting, however, nearly all instruction is given in English.

Table IX.4 summarizes the effort (in man-days) devoted by people to courses outside their places of employment. No breakdown showing the language used in instruction is available, but since these courses are usually taken at the employee's option, it can be assumed that he will choose whichever institution best suits his language abilities and his needs.

The proportion of man-days spent on these courses by French-speaking employees (at 6,145, or 39.5 per cent) is significantly greater than their proportion in total salaried employment (30.8 per cent). This suggests that French Canadians are relatively more active in seeking further education for business than are their English-speaking colleagues. French Canadians also spend more time on language courses taken outside the firm than do English Canadians, and they devote nearly as much time, in absolute terms, to courses in management and supervision as do the greater number of English Canadian employees.

ECQ firms are again the most active in this area, as well as for courses given within the firm. On the basis of average man-days per firm, however, ECC firms are well ahead.

#### *D. Success of French-Language Courses*

The degree of success achieved in taking a course is always very difficult to measure. The ultimate results of courses related to the firm's operations (such as management and supervision, marketing, and process operation) are measurable only in terms of the firm's efficiency and rate of development. Courses in language are also directed, ultimately, towards improving the firm's position, but there

Table IX.4

Training and further education of employees: Courses given outside the firm (man-days)

## All firms

Course description	English-speaking employees	French-speaking employees
Language: French	937	62
: English	226	1,331
Management and supervision	1,282	1,115
Technical and process operations	3,306	2,131
Marketing	453	146
Finance and accounting	2,069	901
Other	1,146	459
Total	9,419	6,145

Ownership-  
location  
group

Firms in sample      Firms giving courses

FCQ	6	4	-	112
ECQ	13	10	3,146	3,894
ECC	4	2	1,687	483
ForFrQ	3	2	72	60
UKQ	5	3	1,405	826
USQ	7	7	2,993	652
USC	3	2	116	118
Total	41	30	9,419	6,145

is a perceptible intermediate measure, and that is the individual's own evaluation of how well he can understand and use another language. In view of the widespread interest of English-speaking businessmen in French-language courses, we sought to obtain such an evaluation from senior executives during our interviews with them.

In recent years, English-speaking businessmen in the Montreal area, with few exceptions, have become quite actively engaged in taking courses in conversational French. The time and money devoted to these efforts have been considerable. Table IX.1 shows that 41 sample firms spent some \$240,000 between them on language courses alone in 1964, representing nearly one-quarter of all direct costs incurred for training and education. Indirect costs cannot be measured, but language courses in French given within the firm to English-speaking



employees accounted for over 28,000 man-days, or nearly 35 per cent of all the time that employees devoted to courses on all subjects.

There is, in addition, the substantial cost of lost opportunities. Continuing advances in technology and in business methods are demanding greater study by managers at all levels. Time and effort spent in taking courses in French necessarily means that less emphasis can be put on these other courses, which affect the efficiency and competitive ability of Canadian industry.

When questioned about these matters, most senior managers replied that these expenditures are a necessary part of the cost of doing business in Quebec. Some mentioned that similar kinds of expense are incurred in doing business in South America, Asia or Europe. Most felt that the cost of language courses is relatively small, having in mind the importance of social changes now under way.

In an attempt to focus closer attention on the matter, we put the question in the form of a challenge: "Courses in conversational French involve the direct expenditure of money, and the diversion of management effort into areas which do not appear, on the surface, to be directly related to profits. The expense might be regarded as a form of investment, but most investments are made with a view to making some direct or indirect return. What benefit does your firm expect to derive from these courses?"

To begin with, virtually everyone interviewed reported that the courses have *not* been successful as far as the ability to speak French is concerned. Most people pointed out, very correctly, that unless a person has the opportunity to practice speaking French, he soon loses the ability. Very often, as soon as the course is over, the erstwhile student returns to his English-speaking working environment, becomes immersed in catching up on the work he has had to postpone while taking lessons, and loses whatever facility in French he may have had. This has generally been the case whether the individual has left the office for a number of days to take a "crash" course, or whether he has devoted one hour a day, several days a week, to private tutoring. A senior officer of one USQ firm told us that his controller had requested permission to take a French course, was given it, and had done quite well. But he was back again three months later to ask permission to take the course again because he had forgotten nearly all he had learned. Permission was granted, but without the expectation of any better results.

In view of this experience, some firms have abandoned the attempt to teach their senior executives to speak French, but most are still carrying on. Generally, courses are given to top management first, then to people at the next level down, and so on. Sales representatives, who may be able to benefit directly from an ability to speak French to their clients, sometimes must wait a long time to take the course, or else must arrange to take one privately at their own expense. In a few firms (mostly those with head offices outside



Quebec), courses in French are given only to people who will benefit directly from them and not to senior management.

Although they admit that proficiency is seldom attained, many executives are convinced that it is worthwhile for them to know *some* French. They believe that the morale of French-speaking employees is greatly improved if senior management people can greet them with a few words of French in the elevator or during a tour around the plant, or if the president or vice-president can make a short speech in French at an employees' meeting.

Opinions are mixed on the value of attempting to communicate in French with French Canadian businessmen at their own level, or with officials of the provincial government. Most English-speaking executives feel that the atmosphere is improved if the conversation opens with a few remarks in French, before switching into English, the language in which both parties usually feel more comfortable. The fact that the conversation soon reverts to English, however, has convinced some English Canadian businessmen that their efforts to speak French are not well received, and that French Canadians resent any attempt by others to invade their language or culture. One French Canadian businessman reinforced this claim, saying that he prefers to carry on business in English and keep his thoughts to himself in French. Most other executives of French-language firms parried the question on this subject, saying, sometimes, that they appreciate the courtesy but that the conversation usually proceeds in English because they are well enough at ease in that language, and that usually there is not enough time to try to carry on the whole conversation in French.

The consensus in both language groups seems to be that, apart from the courtesy of opening remarks, an English-speaking person should not try to carry on a conversation in French with a bilingual French Canadian unless he is very fluent in French. The demand for perfection on the part of the French Canadian speaking English is less stringent.

A noteworthy element in the answer to our question regarding the benefit derived from courses in French lies in what nearly all English-speaking executives believe is the principal reason for the effort: that is, taking a course in French language helps them to understand the French Canadian employees of their company better. Since the language tutors are seldom typical of the French Canadians working for the firm (many tutors are not even French Canadians), the logic behind this reasoning is difficult to understand. What is true is that these tutors are among the few people with whom English-speaking people can discuss the difference between the two cultures and, due to the relative positions of tutor and student and the remoteness of the tutor from company affairs and organizational subtleties, discussion on such matters can be much more free and interesting.

It should be emphasized, without cynicism, that the fact that senior executives are taking courses in conversational French is good for public relations. Their efforts constitute direct, perceptible evidence of the concern for cultural relations felt by management, and they exemplify the attempts being made by business firms to adapt to changes now taking place in Canada.

### *A. The Use of Systematic Techniques*

The policies and practices of a firm relating to the evaluation of its employees' performance in their jobs, and the manner in which tasks are defined and interrelated, will naturally exert a considerable influence on each employee's sense of satisfaction in his job, as well as on his earnings and his rate of advancement through the organization. These are factors which affect the employee, as an individual, very intimately, and it is in this area that the effects of discrimination, if it exists, are likely to be found.

We cannot, of course, test directly for the existence or absence of discrimination. But what we can do, in examining this part of the personnel functional area, is measure the extent to which systematic techniques are used in job analysis and performance appraisal, and also the extent to which a firm adapts to language differences among its employees. The degree of adaptation in other functional areas is explored further in the next chapter (Communication within the Firm) and in Chapter XII (Purchasing and Marketing). For the present, we shall restrict our survey to policies regarding the language used in appraisal interviews when superior and subordinate have different mother tongues, and to the language used in written personnel records.

Our decision to measure the degree to which systematic techniques are employed is, in effect, based on the assumption that the more elaborate the system, the more "rational" it is likely to be in its evaluation and classification of employees. That is, a complete or highly-developed system should leave less room for caprice or the exercise of favouritism or personal predispositions on the part of superiors than would be the case with informal, irregular or *ad hoc* procedures. The effectiveness of this measure cannot be carried too far, however, because a highly-developed system necessarily imposes a degree of rigidity which may encourage the perpetuation of current patterns. If these patterns are unsatisfactory, or if efforts are

being made to change them, the existence of a highly-developed system is no longer a clear advantage. On the other hand, where the employee evaluation system is very informal, or where none exists at all (a situation which is more frequently encountered in smaller firms), much greater flexibility is offered, but the possibility—though not necessarily the exercise—of personal preference or favouritism on the part of the superior is greatly increased.

### *B. Some Effects of Systematization*

An example of the way in which rigidities in the system can encourage the perpetuation of current patterns is given by the answer of sample firms to the question: "Whenever a position is created or becomes vacant in your firm . . . what is your policy regarding the search for candidates outside the firm?" Virtually every respondent, without regard to language of ownership or location, replied that the company's policy is to promote from within whenever possible. Only after all internal sources had been exhausted would the firm look outside. From an operational point of view, this is quite reasonable: each firm has its own expertise, its own technology and its own set of administrative methods, and a man who is currently employed by the firm should be able to take on the responsibilities of a new job more quickly than a newcomer. The policy of promotion from within is also basic to the maintenance of good employee relations—indeed, adherence to seniority rights, which is close to it, is often demanded by trade unions. In short, viewed from inside the industrial framework, the policy of promotion from within is unexceptionable.

Viewed from outside in a political context, however, the results of such a policy, if not the policy itself, do not find the same approbation. For example, we discovered in Chapter VI (Current Conditions: Salaried Employees) that only about 10 per cent of all senior management people earning over \$15,000 per annum have French as their mother tongue. To a great extent, this is the result of a steady process of promotion from within, of people first hired 15 or 20 years ago. At that time, the number of French-speaking people having the required educational qualifications, and willing to work in large manufacturing firms, was probably just about 10 per cent of the total number of people available. During the last five or ten years, the proportion has increased markedly and, as we have seen, qualified French Canadians are being sought, hired and promoted at a rate at least as fast as their English-speaking counterparts (or slightly faster if they are bilingual). The continuance of the policy of promotion from within will mean, however, that "proportional representation" of French Canadians in upper management must await the continuing development and promotion of those already in the stream.

The policy of promotion from within does not necessarily mean that the firm restricts opportunities for promotion to a few people, or that, once an employee obtains a position, he is automatically

Table X.1  
 Personnel and employee relations: Number of employees considered for a vacant position

Ownership- location group	Number of candidates considered										Total no. of firms
	1	2 or 3	3 or 4	4 or 5	6	As many as possible			All qualified	No response	
						Number of firms					
FCQ	-	-	1	-	-	-	1	1	3	6	
ECQ	-	4	3	-	1	-	1	2	2	13	
ECC	-	2	-	-	-	-	-	2	-	4	
ForFrQ	-	1	1	-	-	-	-	-	1	3	
UKQ	-	-	-	-	-	-	1	3	1	5	
USQ	-	3	2	-	-	-	1	-	1	7	
USC	-	1	1	-	-	-	-	1	-	3	
Total	0	11	8	0	1	4	4	9	8	41	



promoted to the next step up as soon as a vacancy occurs. Table X.1 shows the practices followed by sample firms regarding the number of candidates considered for advancement whenever a position is created or becomes vacant. The emphasis is on the employee's qualifications, and within that constraint, it appears that firms try to consider as many candidates as practicable. Of the 41 firms in the sample, none reported considering only one candidate, 11 seek out two or three, eight firms consider three or four, and only one reported that it considers over five (this seems to be the limit of practicability). Thirteen more firms could not specify any number, but reported considering "as many as possible" (four firms) or "all qualified" (nine firms). The practice, of course, varies according to the level of the employee, mainly because of the relative importance of qualifications. When vacancies occur at lower wage levels, the practice often followed is to post a notice on the plant bulletin board, inviting all interested people to apply. For upper management positions, two or three candidates are selected for screening. In several cases, management development programmes are specifically designed to assure a continuing supply of qualified people.

### *C. Job Analysis*

With these qualifications concerning the interpretation and effects of highly-developed systems in mind, we can look at some of the measures of these systems that were made as part of this study. Table X.2 shows, for each ownership-location group, the degree to which a system of job analysis is used. For current purposes, this will serve as a rough measure of the emphasis placed by sample firms on systematization in the personnel functional area.

A "complete" job analysis system refers to the regular use of job descriptions in clarifying lines of authority, classifying positions in the organization and establishing or (more frequently) revising salary rates in these positions. The "casual or partial" job analysis system category combines those instances in which job descriptions are put to only limited use, or are used infrequently, or with only a few employees. This category also includes instances where the techniques are used in a makeshift manner. It will be noted in our questionnaire (*see* Appendix) that the survey question (2.4.1) uses the job description as the principal criterion, and that the question is developed from that base. That is, our analysis here involves the completeness or degree of development of the total job analysis system, of which job descriptions are considered to be the essential component.

As Table X.2 indicates, 16 out of 41 sample firms use a complete job analysis system, 18 use a partial system and six use no system. One firm did not answer the question.

There appears to be little correlation between language of ownership and the extent of systematization in this area. All three

Table X.2  
Personnel and employee relations: Degree to which job analysis system is used

Ownership-location group	Complete J.A. system used	Casual or partial J.A. system used	Number of firms		Total
			J.A. system not used	No response	
FCQ	1	3	2	-	6
ECQ	5	6	1	1	13
ECC	1	2	1	-	4
ForFrQ	3	-	-	-	3
UKQ	1	3	1	-	5
USQ	3	3	1	-	7
USC	2	1	-	-	3
Total	16	18	6	1	41

ForFrQ firms in the sample use a complete job analysis system, while only one FCQ firm (out of six) does so. These are, respectively, the highest and lowest proportions. Nor does there seem to be any link between use of the complete system and nationality of ownership. In both ECQ and USQ firms, the proportion is about the same (five out of 13 ECQ and three out of seven USQ firms use the complete system).

Figures in the "casual or partial" use column, taken alone, do not reveal much more than do those in the "complete" column. Taken together, however, figures in both columns show that a majority of sample firms (if not all) in every ownership-location group use systematic or "rational" techniques in employee relations. The proportion of firms which use no system of job analysis is less than 25 per cent in all cases except FCQ where it is 33 per cent.

#### *D. Performance Appraisal*

Table X.3 shows the degree to which sample firms use a system of performance appraisal in evaluating their employees. Here again, a distinction is made between "complete" and "casual" use of a system. A "complete" appraisal system contains some variations, but in general, the category comprises those cases where there is regular (usually annual) review of each employee's progress, using a set of systematic procedures such as rating forms and appraisal review interviews between superior and subordinate. The "casual or partial" category also contains some variations, but it invariably refers to the fact that appraisal is "left to the discretion of the superior" and that formal procedures are either not used, or not used yet, or not emphasized or enforced. (Because of the central importance of the appraisal interview in this system, data on this question alone are shown in Table X.4.)

Performance appraisal systems are quite widely used, as shown in Table X.3. Of the 41 firms in the sample, 17 use a complete system and 18 use a casual or partial system. The remaining six firms use no system.

In total, these results are similar to those relating to job analysis systems, although the breakdown by ownership-location group is not the same. Here, with respect to use of the complete system, the highest and lowest proportions occur in the two American-owned groups. All three USC firms use the complete system, while only one USQ firm (out of seven) does so. Apart from the single USQ case, however, there is a slight tendency for English-language firms to use the complete system to a greater extent than do French-language firms. For both FCQ and ForFrQ, the proportion is 33 per cent, while for others, the proportion is: ECQ 38 per cent; ECC 50 per cent; UKQ 60 per cent and USC 100 per cent.

Combining the figures in the "casual or partial" column with those in the "complete" column, we note again that some degree of

Table X.3  
Personnel and employee relations: Degree to which performance appraisal system is used

Ownership-location group	Complete P.A. system used	Casual or partial P.A. system used	Number of firms		Total
			P.A. system not used	No response	
FCQ	2	2	2	-	6
ECQ	5	7	1	-	13
ECC	2	1	1	-	4
ForFrQ	1	1	1	-	3
UKQ	3	2	-	-	5
USQ	1	5	1	-	7
USC	3	-	-	-	3
Total	17	18	6	0	41

Table X.4  
Personnel and employee relations: Degree to which appraisal interview is used

Ownership-location group	Appraisal interview used	Appraisal interview not used	No response	Number of firms	
					Total
FCQ	4	2	-		6
ECQ	12	1	-		13
ECC	3	1	-		4
ForFrQ	1	2	-		3
UKQ	5	-	-		5
USQ	4	3	-		7
USC	3	-	-		3
Total	32	9	0		41



systematization is employed in a majority of firms in every ownership-location group. The number of cases where no system is used is very small. The proportion is 33 per cent in the case of FCQ and ForFrQ firms, and less in all other groups.

Table X.4 showing data on use of the appraisal interview, gives an indication of the extent to which sample firms make their employees aware of the performance appraisal system, and enlist their participation in it as it affects them personally.

In all ownership-location groups except ForFrQ, the majority of firms do make use of the appraisal interview. The rank ordering, from the lowest to the highest proportion of firms in the group, is as follows: ForFrQ, USQ, FCQ, ECC, ECQ, UKQ, USC. Once again, no significant differences according to language or nationality of ownership are observable, and the most striking result is the fact that use of the appraisal interview is so uniformly widespread.

#### *E. Language Used*

The appraisal interview is, understandably, an occasion of considerable importance to the employee personally, and it is likely to be a rather "emotionally-loaded" experience, making clear communication difficult even for those who speak the same language. The subordinate is likely to be quite tense, even uncommunicative, if his own mother tongue is not the same as that of his superior. From the point of view of the firm, maintenance of good employee relations and clear communication demand that the language used in the interview should be appropriate to the circumstances. The degree of adaptation by the firm to language differences among its employees is summarized in Table X.5 which tabulates data received in response to the question: "Does your firm have any policy regarding the language used in Performance Appraisal Interviews if superior and subordinate have different mother tongues? If so, please describe briefly."

The table shows that 23 out of the 41 sample firms use either the language of the subordinate or (what is often the same thing) whichever language will ensure best communication. Nine firms stated that they had no policy but did not go on to elaborate on their usual practice. Only two firms (one USQ and one ECQ) replied that the language used is that of the superior. (In both cases, the company reported having a general policy of conducting operations in Quebec in French to the greatest degree possible, making it likely that the mother tongue of both superior and subordinate will be the same.) Seven firms gave no answer to this question, although it can be assumed that since all 41 sample firms had replied to the question of whether or not they conducted appraisal interviews, this response means that they have no policy regarding the language used.

The proportion of firms which use either the mother tongue of the subordinate or the language which will ensure best communication is

Table X.5  
Personnel and employee relations: Policy regarding language used in appraisal interview where superior and subordinate have different mother tongues

Ownership- location group	Use mother tongue of superior	Use mother tongue of subordinate	Use language which ensures best communication			Total
			No policy	No response		
FCQ	-	1	1	-	4	6
ECQ	1	4	4	3	1	13
ECC	-	1	1	1	1	4
ForFrQ	-	1	1	1	-	3
UKQ	-	3	1	1	-	5
USQ	1	1	2	2	1	7
USC	-	2	-	1	-	3
Total	2	13	10	9	7	41

Table X.6  
Personnel and employee relations: Language used in written records of job description

Ownership-location group	French	English	Both French and English	Number of firms		Total
				Question not applicable	No response	
FCQ	-	-	4	1	1	6
ECQ	-	9	2	2	-	13
ECC	-	2	-	2	-	4
ForFrQ	-	1	1	1	-	3
UKQ	2	1	2	-	-	5
USQ	-	5	2	-	-	7
USC	-	2	1	-	-	3
Total	2	20	12	6	1	41

50 per cent or more for UKQ, ForFrQ, USC, ECQ and ECC firms (ranked from the highest percentage downward). It is 43 per cent among USQ firms and 33 per cent among FCQ firms. In short, most firms and most ownership-location groups show a high degree of adaptability toward language differences among their employees.

The last measure examined in this chapter, given in Table X.6, relates to the language used in written records of the job analysis system. Of the 41 firms in the sample, 20 use only English, 12 use both languages and two use only French. The question is not applicable in the case of six firms, and one gave no response. Interestingly, the two firms that use only French in the written records are both UKQ, while all four FCQ firms answering the question reported that they use both English and French.

The dominant use of English in the written records, either alone or combined with French, is very likely due to the fact that over the past decade or so, the fields of job analysis and job evaluation have acquired a rather technical terminology of their own. Since most of the important developments in the field have been American or British, the language of this terminology is predominantly English. We were told that for many terms, no equivalent French wording exists. In addition, the filing and record systems of companies that have operations elsewhere in Canada or associates in other countries must make use of a common language (usually English) to facilitate communication.

#### *F. Perceptions and Attitudes of Senior Management*

The data cited above are objective measures of current practices, obtained through the use of our questionnaire. In matters relating to employee evaluation, however, subjectively-defined considerations such as management attitudes also weigh heavily, and we sought to obtain some information on these factors during our interviews.

In order to sound out the attitudes of senior management people towards French- and English-speaking employees, we asked whether they felt they could perceive any differences in performance between the two groups in jobs at staff and supervisory levels.

In virtually every case, English-speaking executives initially replied that they felt there was more difference between individuals than between groups, and that they could not generalize. French-speaking executives were much more willing to enter into discussion on the subject.

Among FCQ firms, senior managers were in general agreement that the French Canadian tends to be more individualistic, more discursive, somewhat more authoritarian in supervisory behaviour, and seems to prefer to be "king of a small country rather than duke or prince of a big one." English-speaking employees, on the other hand, are

thought to be more realistic, more methodical, more willing to associate their own objectives with those of the company, and less authoritarian. In terms of effectiveness on the job, however, no one could discern any difference.

The president of one UKQ firm expressed much the same opinion, taking as his example the difference between salesmen in the Quebec division office and those in the Ontario division. In Quebec, where all employees are French Canadian, "organization" is at a minimum, records and forms are not in a good state, but morale is high and so is the level of sales. In the Ontario division, staffed by English Canadians, records are kept rigorously up to date, forms are in good order, morale is also high, and the level of sales is just as high, proportionately, as it is in Quebec. The president wondered, rhetorically, what would be the effect of switching sales managers—the French Canadian to introduce more "spirit" into the Ontario office, and the English Canadian to introduce more "order" into the Quebec office. It would be an interesting experiment, but the president is reluctant to try in case results, in terms of sales volume, turned out to be the opposite of what is desired.

Many English-speaking executives commented that it was difficult to compare like with like because of the relatively small number of French Canadians having the same education and experience as English Canadian employees at the staff level. Where it was possible to compare, little difference could be observed, except in mobility. Educational factors do create differences, however; a relatively larger proportion of French Canadians have a liberal arts background, and are therefore better suited for work in broader, non-technical functional areas.

Some company executives, representative of all ownership-location groups, reported that French Canadians are often less willing to accept responsibility—for example, in supervision or in commitment of large amounts of company funds to the purchase of equipment.

As suggested earlier, some English-speaking executives feel that the French Canadian engineer or chartered accountant tends to lay more emphasis on the professional aspects of his work. This view was shared by a number of French Canadian senior officers of English-language firms. In some industries, such as pulp and paper, where the young engineer's path to the general manager's position traditionally starts with jobs in the production area (which involve shiftwork) the attractiveness of such work to the recent graduate (and especially, the French Canadian) is felt to be very slight. Usually, also, employment involves moving to a relatively remote small town in the province. Several people mentioned the young French Canadian's reluctance to "get his hands dirty," though they sometimes added they were encountering difficulties in getting young English-speaking engineers to work for them, as well.



*G. The Position of English-Speaking Employees*

In view of the current emphasis being placed on employment and promotion of French Canadians in industry, the discussion in many of our interviews naturally came round to the effect these policies are having on English-speaking employees.

It seems to be the view of most company executives that no problem exists, so far. The new policies do give more emphasis to French-speaking employees, but the low availability of qualified French Canadians necessarily means that implementation will be slow. In the meanwhile, continuing expansion of the economy is ensuring that a sufficient number of job opportunities are opening up to satisfy the aspirations of employees of all language groups. Some people mentioned that the country is fortunate that these shifts in emphasis are taking place during a time of expansion, when changes in the work force can be brought about through new appointments as openings occur, rather than through outright replacement.

We should stress that we are dealing here, not with the attitudes of English-speaking employees themselves, but with senior management's perception of these attitudes and the degree of management's concern with employee morale and behaviour. In some firms, executives reported that they believe English-speaking employees at the middle management level may not be as convinced as they once were that unrestricted job opportunities are still open to them. In some cases, where bilingual requirements have been introduced as part of certain job specifications, it is well known that job opportunities definitely are restricted now, as they were not some years ago. However, few managers reported having done much to relieve the concern of English-speaking employees about their future, except to emphasize the importance of bilingual ability and (in some cases) to offer language courses. The consensus seems to be that the threat to job security, if it exists (and this is disputed), is still very remote.

A French-speaking vice-president of one ECQ firm, speaking of conditions in his company, put forward the theory that there is an "impermeable zone" of English Canadians at the middle-management level, through which it is very difficult, if not impossible, for a rising young French Canadian to pass. These English Canadians, the vice-president said, resist the use of French and tend to group themselves into "little islands," especially in their social life. The pattern is emphasized in company towns far away from Montreal. The French Canadian executive did note, however, that he himself had run into no hostility or impediment to his advancement through the "impermeable zone," and we heard of no other difficulty of this nature from any other senior French Canadian executive interviewed.

The case was cited earlier of one ECQ firm which has based its employment and promotion policies on what it regards as an obligation towards English-speaking candidates whose fathers were first brought

into the region by the company when it began operations. This can be considered as one extreme, and it is the only case we encountered where such an attitude prevails.

Another ECQ firm in the same industry has taken a different course. The combination of government and social pressures encouraging the employment of French Canadians in Quebec, the continuing loss of its English-speaking employees in technical and staff positions to employers outside Quebec, and its own westward diversification of manufacturing activity, have all resulted in marked changes in this company's corporate policy and character. The company is now actively pursuing a programme designed to give it a French Canadian image. It is seeking to employ as many French Canadians as possible to occupy specialist and supervisory positions in Quebec, because it is felt they will be less likely to leave the province. When asked about English-speaking employees who remain, company executives shrugged their shoulders and replied, "This doesn't mean there will be no room left for them, but they must be bilingual, like French Canadians in senior management." It developed later that management is giving serious thought to moving the head office away from Quebec and setting up a Quebec division which would operate principally in French, except for outside contacts.

At the opposite extreme is a small number of firms, owned by English-speaking interests, that undertook some years ago to create a French image, often for reasons relating to market patterns. A senior French Canadian executive related to us how the change-over from English- to French-speaking management had proceeded. In the days before the change-over, relations had not been good. When the person we were interviewing was first promoted to the managerial ranks, he was the only French Canadian in the group, and one of his superiors had told him that he was, in a sense, fortunate that there were no qualified English Canadians in the company who could take on the job. (The year was 1944.) When he had suggested greater use of French by the company, he was asked, "Why should we make concessions to these people?" His answer was, "Because they represent 80 per cent of our market," but no changes were made for some years until the decision came from above to revise the image completely. This involved forming a company that would reflect French Canadian society in all respects. It was specified that this would not just mean the use of French, but the eventual replacement of all managerial staff with French Canadians.

Changes were not made overnight, and there are still some English-speaking people in management, but these are, in the main, older employees; most younger men left soon after the new policies were promulgated. Management people in operations outside Quebec have been made aware that they cannot expect to be promoted to head office. According to the executive giving the interview, his greatest loss occurred when he had to tell his executive vice-president— a fluently bilingual English Canadian—that he could not hope to succeed to the

presidency. The vice-president left to take a position with another firm, and the two men are, reportedly, still good friends.

To repeat, most firms are not undertaking any drastic changes. Most are making genuine efforts to attract and retain French Canadian employees, and to promote them as fast as possible. Many senior management people expressed the belief that there could conceivably be some reaction from English-speaking employees, some day, but that there seems to be fairly general agreement among English-speaking management and employees that they should mark time a little, to permit French Canadians to catch up.

Besides educational qualifications and experience, the greatest advantage possessed by English-speaking employees, as a group, is their greater mobility. This is not only an advantage in their present jobs; it also gives them a sense of security, since they know that they could, if necessary, find work outside Quebec. Recognition of this fact seems to be largely responsible for their rather subdued reaction to current changes.

### *A. Introduction*

One of the most important aspects of working in a bilingual-bicultural setting, from the point of view of the employee, is the language used in day-to-day operations within the firm. As pointed out in other sections of this report (principally Chapter IV) the language of business used by the firm in its transactions with customers or suppliers may be determined by outside factors over which it has little control, but the language used in communication inside the firm can be controlled to a much greater extent. In unilingual regions, where the language of ownership or management is the same as that of employees, the problem of selecting which language to use in daily business, if a problem exists, will stem from the influence of external factors only. When the mother tongue of employees is other than that of management, or where both English- and French-speaking employees work together in the same plant or office, there are additional complications.

In the present section, we shall look at some of the media used in internal communication, and seek to determine whether, for example, French Canadian employees in firms where the language of ownership is English must use English in their work, or whether the employing firms tend to adapt their practices to suit the mother tongue of their employees. Although most communication is oral, we shall restrict ourselves here to other forms, mainly written, which the employee sees all around him in the workplace, and which he uses in his work. It is much more difficult to document the language used in oral communication, and we must rely on reports of practices in specific areas, such as employee evaluation interviews, discussed in the preceding chapter, and on measures of bilingual ability as part of the job requirement, as discussed in Chapter VI (Current Conditions: Salaried Staff).

Our data, which are presented in tabular form in succeeding pages, can be used in two ways: first, as a description of the language environment perceived by employees, and then, as a measure of the degree of adaptation of English-language and French-language firms to language patterns in various regions (Quebec and the rest of Canada). A third measure is also relevant in some cases, and that is the degree to which bilingualism is practised in parts of Canada outside Quebec.

Most of the media that are examined concern the environment as it affects all employees. A few, such as interoffice memoranda and shop drawings, are, of course, meaningful only to those employees who use them. Altogether, the media constitute a large segment of the work environment. They fall into three general groups, as follows:

- 1) Those designed to facilitate operations, including:
  - interoffice memoranda,
  - shop drawings,
  - instruction manuals,
  - training manuals.
- 2) Those which affect each employee personally, including:
  - employment application forms,
  - booklets describing employee benefits,
  - employee identification cards,
  - booklets describing the union contract.
- 3) Those which affect all employees generally, including:
  - general notices,
  - safety posters,
  - direction and other signs,
  - employee newspaper.

A total of 41 firms replied to this part of the questionnaire. Since not all forms of communication are applicable in every case, the number of firms in each ownership-location group that were unable to respond to a particular question is shown at the foot of each table.

## *B. Forms of Communication Used to Facilitate Operations*

### *1. Interoffice memoranda*

Table XI.1 shows, for each ownership-location group, the number of firms using English only, in interoffice memoranda, the number using French only, and the number using both languages or either language (at the writer's choice) in Quebec or throughout all operations in Canada. The same format is used in all subsequent tables in this section to permit easy comparison.

The data relate only to memoranda written for general distribution. In most firms, a memorandum sent from one individual to another, without wider distribution, will normally be written in the language suitable to both parties. However, it often occurs that notes or



Table XI.1  
Intrafirm communication: Interoffice memoranda

All firms: Language used		Region	Ownership-location group							Total
			FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only		All Canada	-	6	4	1	3	3	2	19
Both English and French either separately or together (English elsewhere, if applicable)		Quebec only	-	6	-	1	2	1	1	11
Both English and French either separately or together		All Canada	1	1	-	-	-	-	-	2
French only (English elsewhere, if applicable)		Quebec only	5	-	-	1	-	2	-	8
Not applicable			-	-	-	-	-	1	-	1
Total			6	13	4	3	5	7	3	41

reports are intended for fairly widespread use in all operations of the company, and this is the area where general policy or practice must be established. Thus, French (or English) will be used only where it is reasonably certain that all interested recipients will be able to understand the language, or where translation facilities are available. Except for general notices, memoranda are seldom prepared in both languages; either one or the other will be used.

Of the 40 firms offering information in this area, nearly half (19) use only English, and this applies to all ownership-location groups except FCQ. Eleven other firms use both English and French in Quebec, and English only, elsewhere. Only two firms (one FCQ, one ECQ) use both English and French in all locations in Canada, and eight firms (five FCQ, one ForFrQ and two USQ) use only French in Quebec, and English elsewhere.

Among regional firms, which have all their operations in Quebec and the adjacent bilingual-bicultural regions, nearly half (seven out of 16) use only English in interoffice memoranda. Four use both languages and five (all FCQ firms) use only French.

Some idea of the pressures exerted by factors encouraging the use of English, even within the firm, is given by the fact that the only national FCQ firm uses both languages, and that one regional ForFrQ firm uses only English in all its interoffice correspondence.

## *2. Shop drawings*

The language of technical communication is principally English, because of the importance of outside sources of technical information, and because of the relatively small proportion of technically-trained French-speaking people. This is reflected in Table XI.2 which shows that the exclusive use of French on shop drawings in Quebec is restricted to four regional FCQ firms. However, some idea of the gradually increasing use of French is given by the fact that five firms (only one of which is FCQ) now use both languages in their operations in Quebec. Only two of these are regional firms.

## *3. Instruction manuals*

The general purpose of instruction manuals is to translate technical information relating to a production process or a specialized piece of equipment into operating rules and procedures for the use of operating employees and supervisors. In most cases, the basic technical information is originally expressed in English as it comes from the manufacturer of special equipment, or an associate company, or a firm of engineering consultants specializing in process design, or even the company's own engineering department. The easiest and least expensive procedure, then, is to write the instruction manual in English. Where translation into French is necessary to ensure clear understanding of the manual's contents, an additional expense is incurred. In most cases, the burden of translation is undertaken by

Table XI.2  
Intrafirm communication: Shop drawings

All firms: Language used	Region	Ownership-location group							Total
		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only	All Canada	-	11	2	2	3	6	2	26
Both English and French either separately or together (English elsewhere, if applicable)	Quebec only	1	2	-	-	1	1	-	5
Both English and French either separately or together	All Canada	1	-	-	-	-	-	-	1
French only (English elsewhere, if applicable)	Quebec only	4	-	-	-	-	-	-	4
Not applicable		-	-	2	1	1	-	1	5
Total		6	13	4	3	5	7	3	41

Table XI.3  
Intrafirm communication: Instruction manuals

All firms: Language used	Region	Ownership-location group							
		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	Total
		Number of firms							
English only	All Canada	-	2	1	2	-	4	1	10
Both English and French either separately or together (English elsewhere, if applicable)	Quebec only	1	10	2	-	5	2	2	22
Both English and French either separately or together	All Canada	-	1	-	-	-	1	-	2
French only (English elsewhere, if applicable)	Quebec only	5	-	-	-	-	-	-	5
Not applicable		-	-	1	1	-	-	-	2
Total		6	13	4	3	5	7	3	41

the firm's own technical staff because it is usually found that if the translation is done outside, by people who are not familiar with the firm's own processes, errors and misunderstandings arise which reduce the usefulness of the manual. Additional problems often arise because for many technical terms there is no known French equivalent, or if there is, the wording is not familiar in Canada.<sup>1</sup>

Table XI.3 shows that, despite the difficulties and expense involved in translation, most firms in the sample do provide manuals in both French and English for their employees. Twenty-two out of 39 firms do so in Quebec, and an additional two (one ECQ and one USQ) extend the practice to all their operations in Canada. Ten firms (including two ForFrQ) provide instruction manuals only in English, and five (all FCQ) provide them only in French, in Quebec. A relatively greater proportion of regional firms provide manuals in French. Here, four firms (all FCQ) use French only, seven use both languages, and five (two ForFrQ, two USQ, and one ECQ) use only English.

#### 4. *Training manuals*

Training manuals, which are designed principally for the use of new employees or employees starting new jobs, are usually concerned with a wider scope of the firm's operations than are instruction manuals, and they are less technical. Also, a given training manual is generally used only once by an employee, whereas instruction manuals are used for reference. Thus, the language used in a training manual tends to have a greater impact on an employee at a time when he is less familiar with the job and the company, but the effect is usually felt only once.

Table XI.4 shows that, although fewer firms are involved, a relatively greater number of training manuals is available in both languages than is the case with instruction manuals. As suggested above, this is probably accounted for by two factors: (1) the degree of bilingual ability expected of new employees is lower, and (2) influences (such as technical terminology) tending to induce the use of English are less powerful.

Of the 29 firms that use training manuals, 16 provide them in both languages in Quebec and five others extend this practice to all operations in Canada. Three (all FCQ) use only French in Quebec and five (two ECC, two USQ, and one USC) use only English.

Among regional firms, the practice of providing manuals in French is more widespread. In six cases out of nine, manuals are available in both languages.

### C. *Forms of Communication that Affect the Employee Personally*

#### 1. *Employment application forms*

Very often, the first communication an employee has with the firm



Table XI.4  
Intrafirm communication: Training manuals

All firms: Language used	Region	Ownership-location group							Total
		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only	All Canada	-	-	2	-	-	2	1	5
Both English and French either separately or together (English elsewhere, if applicable)	Quebec only	1	8	1	-	2	2	2	16
Both English and French either separately or together	All Canada	-	1	-	-	2	2	-	5
French only (English elsewhere, if applicable)	Quebec only	3	-	-	-	-	-	-	3
Not applicable		2	4	1	3	1	1	-	12
Total		6	13	4	3	5	7	3	41

for which he works is through the application form. There would be good indication of a firm's failure to adapt to the linguistic abilities of its employees if, for example, an English-language firm offered application forms in English to French-speaking people.

In fact, as Table XI.5 indicates, the degree of adaptation is very high. Of the 41 firms represented, 33 offer forms in both languages in Quebec (sometimes combined on one sheet and sometimes printed separately), and eight of the 33 extend the practice to all locations in Canada. Only one firm (USQ) has application forms only in English in Quebec, while seven (five FCQ, one UKQ and one USQ) offer only French-language forms in Quebec.

Apparently, any lack of adaptation that is to be found is in the direction of French into English, not English into French. This may be because the seven firms concerned do not anticipate a sufficient number of applications from English-speaking people to warrant printing bilingual forms.

## *2. Booklets describing employee benefits*

Once hired, an employee's evaluation of the firm's willingness to recognize the importance of his mother tongue may be determined by the language which it uses to describe certain elements of the employment agreement that are important to him personally. This would include such elements as the pension plan, the group insurance plans, vacation policy and other elements of the industrial relations policy. All firms in the sample print booklets describing such employee benefits and, as indicated in Table XI.6, all but one (USC) offer them in French in Quebec. All but five (all FCQ) also offer them in English. Of the 35 firms having booklets in both French and English (either combined or bound separately), 11 make them available in all their operations in Canada. All regional firms have booklets available in French and all but five (FCQ) have them in English as well.

## *3. Certificates of employee benefits*

Certificates of employee benefits include such documents as the "official" copies of the group life and the group accident insurance policies. Usually, they are made available (at least as to text) by the insurance firms with which the policies are held.

Here again, all 41 firms give such certificates to their employees (see Table XI.7). Two (one USQ and one USC) offer them only in English in Quebec and four (all FCQ) offer them only in French. The 35 other firms, including 15 which extend the practice all across Canada, offer certificates in both languages. Of the 16 regional firms, 12 have certificates in both English and French and four (FCQ) have them in French only.

Table XI.5  
Intrafirm communication: Employment application forms

All firms: Language used	Region	Ownership-location group							
		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	Total
		Number of firms							
English only	All Canada	-	-	-	-	-	1	-	1
Both English and French either separately or together (English elsewhere, if applicable)	Quebec only	1	11	4	2	2	3	2	25
Both English and French either separately or together	All Canada	-	2	-	1	2	2	1	8
French only (English elsewhere, if applicable)	Quebec only	5	-	-	-	1	1	-	7
Not applicable		-	-	-	-	-	-	-	-
Total		6	13	4	3	5	7	3	41

Table XI.6  
Intrafirm communication: Booklets describing employee benefits

All firms: Language used		Ownership-location group								Total
		Region	FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only	Both English and French either separately or together (English elsewhere, if applicable)	All Canada	-	-	-	-	-	-	1	1
		Quebec only	-	11	3	2	2	4	2	24
Both English and French either separately or together	French only (English elsewhere, if applicable)	All Canada	1	2	1	1	3	3	-	11
		Quebec only	5	-	-	-	-	-	-	5
Not applicable			-	-	-	-	-	-	-	-
Total			6	13	4	3	5	7	3	41

Table XI.7  
Intrafirm communication: Certificates of employee benefits

All firms: Language used	Region	Ownership-location group							Total
		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only Both English and French either separately or together (English elsewhere, if applicable)	All Canada	-	-	-	-	-	1	1	2
	Quebec only	1	8	3	2	2	2	2	20
Both English and French either separately or together French only (English elsewhere, if applicable) Not applicable	All Canada	1	5	1	1	3	4	-	15
	Quebec only	4	-	-	-	-	-	-	4
		-	-	-	-	-	-	-	-
Total		6	13	4	3	5	7	3	41



#### *4. Employee identification cards and badges*

It might be supposed that an employee would be particularly sensitive to his company's lack of adaptation to language differences if he had to wear a badge or carry a card identifying him in a language other than his own. In fact, many firms avoid the problem of bilingualism on badges and cards by restricting their content to the employee's name, number and (sometimes) his picture, as well as the name of the company. At least 16 firms in our sample either pursue such a practice, or else do not use identification cards or badges at all. These could not reply to our question about the language(s) used.

Of the 25 firms able to specify which language or languages are used on identification cards and badges, six (including one FCQ) use only English in Quebec, six (including one UKQ) use only French, and the remaining 13 use both languages either together or separately. Among regional firms, five use only French, three use only English and four use both. Table XI.8 shows the details.

#### *5. Union contracts*

In addition to filing official copies of their union contract with the Quebec Labour Relations Board, most companies make printed copies available to employees. As Table XI.9 indicates, all firms in the sample except one (USC) make booklets available in French in Quebec, and all but nine have them in English as well. Of the nine that print booklets only in French, five are FCQ, two are ForFrQ, one is ECQ and one is UKQ. A relatively large proportion of sample firms (38 out of 41) have union agreements.

Six of the 14 regional firms reporting do not have copies of the union contract printed in English. The remaining eight offer both languages.

The language used in the union contract is a good measure of the adaptation of firms to the language preferences of wage-roll employees. From our data, it appears that adaptation is very high, with respect to French-speaking employees, but quite low with respect to English-speaking employees—particularly in firms where the language of ownership is French. It is likely, however, that the number of English-speaking employees in these firms is small.

#### *D. Forms of General Communication with All Employees*

##### *1. Notices to employees*

General notices to employees, which may relate to any one of a great number of subjects, can take the form of memoranda posted on the bulletin board in the workplace or cafeteria, or they can be printed in a number of copies and distributed to each employee individually, for example, in his pay envelope. In this context we shall

Table XI.8  
Intrafirm communication: Employee identification cards and badges

All firms: Language used	Region	FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	Ownership-location group		
									Number of firms		Total
English only	All Canada	1	3	1	-	1	-	-	6		
Both English and French either separately or together (English elsewhere, if applicable)	Quebec only	1	5	1	-	-	2	2	11		
Both English and French either separately or together French only	All Canada	-	-	-	-	-	2	-	2		
(English elsewhere, if applicable)	Quebec only	3	-	-	2	1	-	-	6		
Not applicable		1	5	2	1	3	3	1	16		
Total		6	13	4	3	5	7	3	41		

Table XI.9  
Intrafirm communication: Union contracts

All firms: Language used	Region	Ownership-location group							Total
		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only	All Canada	-	-	-	-	-	-	1	1
Both English and French either separately or together (English elsewhere, if applicable)	Quebec only	-	12	3	-	4	6	1	26
Both English and French either separately or together	All Canada	-	-	1	-	-	1	-	2
French only (English elsewhere, if applicable)	Quebec only	5	1	-	2	1	-	-	9
Not applicable		1	-	-	1	-	-	1	3
Total		6	13	4	3	5	7	3	41

exclude general notices which are printed in the employee newspaper, since that medium is treated separately later in this section.

In this instance again, as shown in Table XI.10, the degree of adaptation to French is significantly higher than it is to English, although most firms (30 out of 41) use both languages. One firm (UKQ) uses only English, while 10 firms (six FCQ and one each, ECC, ForFrQ, UKQ and USQ) use only French in their operations in Quebec. Interestingly, four of these 10 are national firms. Among the 16 regional firms, six use only French and 10 use both languages.

## 2. *Safety posters*

It can be observed (not altogether facetiously) that safety posters and direction signs constitute a major part of the decoration of many manufacturing plants. Certainly they are among the first things noticed by a new employee or a visitor, and their ubiquity means that they contribute a great deal to whatever bilingualism there may be in the work environment.

On the other hand, the deliberate practices of a given firm can be affected by the fact that most safety posters are purchased from commercial organizations that specialize in such supplies and most of the standard posters they offer in Quebec are bilingual. Unilingual English and unilingual French posters are available also, but the firm would have to go out of its way, as it were, to specify them.

Table XI.11 shows that 24 out of 40 firms use bilingual safety posters in Quebec, and four more extend this practice to all their operations in Canada. Twelve use French only and none use English only, in Quebec. On both regional and national scales, English-language firms tend towards bilingualism, while French-language firms tend towards the exclusive use of French.

## 3. *Direction and other signs*

Table XI.12 shows that most firms (26 out of 37) employ both English and French direction and other signs in the workplace. One (ForFrQ) uses only English and 10 use only French in Quebec.

This report relates only to those signs in which wording is used. The most common practice, however (in unilingual as well as bilingual regions), is to employ simple symbolic or pictorial representation wherever possible.

## 4. *The employee newspaper*

Only 26 of the 41 firms in the sample publish an employee newspaper. Of these, all but two print it in both English and French. One UKQ firm uses only English and one FCQ firm uses only French in Quebec.

The number of firms (eight) that make both languages available in all operations in Canada is proportionately quite high, considering some of the difficulties involved, as reported to us in our

Table XI.10  
Intrafirm communication: Notices to employees

Ownership-location groups										
All firms:	Language used	Region	FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	Total
English only	Both English and French either separately or together (English elsewhere, if applicable)	All Canada	-	-	-	-	1	-	-	1
		Quebec only	-	12	3	2	3	6	3	29
Both English and French either separately or together	French only (English elsewhere, if applicable)	All Canada	-	1	-	-	-	-	-	1
		Quebec only	6	-	1	1	1	1	-	10
Not applicable			-	-	-	-	-	-	-	-
Total			6	13	4	3	5	7	3	41



Table XI.11  
Intrafirm communication: Safety posters

All firms:	Language used	Region	Ownership-location group							Total
			FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only Both English and French either separately or together (English elsewhere, if applicable)		All Canada Quebec only	-	-	-	-	-	-	-	-
			1	9	3	1	5	3	2	24
Both English and French either separately or together French only (English elsewhere, if applicable) Not applicable		All Canada Quebec only	-	2	-	1	-	1	-	4
			5	2	1	1	-	3	-	12
Total			-	-	-	-	-	-	1	1
			6	13	4	3	5	7	3	41

interviews. Although no breakdown is available, we would assume that in the majority of these eight cases, separate English and French versions are available at the employee's option because, apparently, "mixing" articles in the two languages in the same copy is not well received by either French- or, especially, English-speaking employees. The use of a common copy, therefore, tends to be confined to cases where the expense of separate printing is too high, or where the company deliberately sets out to encourage bilingualism through this means. Even so, whenever the two languages are combined, the texts are often segregated and printed back-to-back, the layout being such that both covers are "front covers," and the textual material follows—all in the same language—until the middle page is reached. Very often, the same procedure is followed in printing booklets of employee benefits.

Table XI.12  
Intrafirm communication: Direction and other signs

All firms: Language used	Region	Ownership-location group							Total
		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only Both English and French either separately or together (English elsewhere, if applicable)	All Canada	-	-	-	1	-	-	-	1
	Quebec only	1	10	1	-	4	4	2	22
Both English and French either separately or together French only (English elsewhere, if applicable)	All Canada	-	2	1	-	-	1	-	4
	Quebec only	4	-	1	2	1	2	-	10
Not applicable		1	1	1	-	-	-	1	4
Total		6	13	4	3	5	7	3	41

Table XI.13  
Intrafirm communication: Employee newspaper

All firms: Language used	Region	Ownership-location group							Total
		FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only	All Canada	-	-	-	-	1	-	-	1
Both English and French either separately or together (English elsewhere, if applicable)	Quebec only	2	7	1	1	1	3	1	16
Both English and French either separately or together	All Canada	-	1	2	-	-	3	2	8
French only (English elsewhere, if applicable)	Quebec only	1	-	-	-	-	-	-	1
Not applicable		3	5	1	2	3	1	-	15
Total		6	13	4	3	5	7	3	41





*Part 1. Purchasing**A. Introduction*

Two of the most important areas of contact that a manufacturing firm has with the business world surrounding it are marketing (discussed in Part 2 of this chapter) and procurement. In both these areas, the commonly-held precept is that, all other things being equal, the customer is king, and that his preferences determine what practices will be used in carrying out all transactions. In the current context, this could be taken to mean that the language of business would be the language of ownership of the purchasing firm.

Where competition between sellers is keen, there is indeed a tendency to accommodate the buyer in this way, but in fact all other things are not equal, especially in industrial markets. Material shortages, or special requirements, or the existence of only one or two principal suppliers, or a relatively small size of order (compared with other buyers) all lead to a reduction in the degree of competition between sellers, and may in fact induce competition between buyers. Again, the mother tongue of the person actually responsible for making a purchase need not be the same as that of ownership or management, although orders or supply contracts involving relatively large amounts of money often go to senior management for final negotiation. Another factor may be the degree of importance that must be attached to technical features. In general, the greater the technical orientation of specifications or conditions of purchase, the more reliance must be placed on the technology of the industry, which may be national or international. As noted in earlier sections, this involves the use of English both inside and outside the firm.

In any event, industrial buyers cannot usually put matters of personal preference, such as language, in first place. Other factors, including cost, quality, continuing availability, terms of credit and reciprocal business, must all come first. The majority of officers of French-language firms, in fact, feel that the language used is only incidental. Most of their men are bilingual in any case, and those who are not reported that the language problem can be solved easily enough through the use of bilingual people in either the buying or the selling firm.

Among English-language firms, practices regarding language take a somewhat different turn. For large orders, the factors which favour the use of English, described above, are even stronger but it is often the policy of these firms to channel as many small orders as possible through purchasing offices located in manufacturing plants. Emphasis is usually placed on buying locally whenever possible. For plants located in Quebec, this involves dealing with local merchants, many of whom are French-speaking, and efforts are made to ensure that plant purchasing agents can speak French to them. Both these elements of policy—buying locally and buying in French, especially in Quebec outside of Montreal—are considered to be essential in maintaining good public relations.

The three following tables summarize the situation as perceived by the people responsible for developing purchasing policies and practices in the sample firms. The importance of the ability of purchasing personnel in various regions of Canada to speak French and to speak English is shown, respectively, in Tables XII.1 and XII.2. The measures used here bear some relationship to the "bilingual requirement" indexes employed in Chapter VI (Current Conditions: Salaried Employees), except that here our emphasis is on policies and practices affecting suppliers, not individual employees. Accordingly, the unit of measure in Tables XII.1 and XII.2 is the "purchasing unit," or office, and not each individual working in that office. In Table XII.3, which relates to the language used in written communication with suppliers, the breakdown is by ownership-location group and the unit of measure is the number of firms.

#### *B. Purchasing Personnel: Importance of the Ability to Speak French*

Of the 22 firms out of 41 that maintain purchasing offices in Quebec outside of Montreal, 10 consider it a necessity for employees in those offices to be able to speak French in dealing with suppliers, and six more consider it a significant advantage (Table XII.1). Only one firm (ECQ) considers it unimportant. Among the ten firms that consider ability in French a necessity are: one FCQ, four ECQ, one ECC, one ForFrQ, one UKQ, and two USQ.

In Montreal, where bilingualism is more common, 32 firms have purchasing offices. Of these, six firms (five FCQ and one ECQ) consider ability in French a necessity, and 10 (one FCQ, three ECQ, two ECC,

Table XII.1  
Purchasing: Importance of ability to speak French in dealing with suppliers (for personnel in purchasing units in various regions)

Location of purchasing unit	French-language requirement			
	A necessity	A significant advantage	A minor advantage	Not important
Atlantic provinces	-	-	2	5
Quebec excl. Montreal	10	6	5	1
Metropolitan Montreal	6	10	13	3
Ontario	1	1	4	20
Western provinces	-	-	2	10
				12

Table XII.2  
Purchasing: Importance of ability to speak English in dealing with suppliers (for personnel in purchasing units in various regions)

Location of purchasing unit	English-language requirement			
	A necessity	A significant advantage	A minor advantage	Not important
Atlantic provinces	9	-	-	-
Quebec excl. Montreal	18	5	-	-
Metropolitan Montreal	29	4	-	-
Ontario	21	-	-	-
Western provinces	12	-	-	-
				12

\*The total number of purchasing offices in each region is not the same here as in Table XII.1 because not all firms considered that both questions applied to all purchasing offices.

one ForFrQ, two UKQ, and one USC) consider it a significant advantage in dealing with suppliers. Only three firms (all USQ) feel that the ability to speak French is not important.

In Ontario, one USC firm feels that it is a necessity for purchasing personnel to speak French, and one other USC firm believes that it is a significant advantage. (This follows from a policy of centralizing purchasing at head office.) In 20 out of 26 purchasing offices, however, the ability to speak French is not considered important. Similarly, in the Atlantic and Western provinces, the ability of purchasing personnel to speak French is considered to be a minor advantage, at best, and of no importance in most cases.

In summary, it appears that most English-language firms adapt well to the use of French in purchasing transactions in Quebec, particularly in those parts of the province outside Montreal. Of the 10 firms considering it a necessity for purchasing personnel to be able to speak French, only two are FCQ or ForFrQ.

#### *C. Purchasing Personnel: Importance of the Ability to Speak English*

Table XII.2 shows the other side of the coin, the importance given to the ability of purchasing personnel to speak English in dealing with suppliers. Here we find that most firms consider the ability to speak English a necessity in purchasing offices of every region. Of the five firms in Quebec outside of Montreal, that consider it a significant advantage but not a necessity, two are ECQ, one is ECC, one is ForFrQ, and one is USQ. Four firms (one ECC, two USQ, and one USC) believe ability in English is a significant advantage in purchasing offices in Montreal. All FCQ firms consider that the ability to speak English is a necessity in all regions.

#### *D. The Language Used in Written Forms*

Although most communication between buyer and seller is oral (and, as outlined above, the majority of firms ensure that purchasing personnel can adapt well to their environment in this regard), the final purchase agreement is usually put in writing. In many cases, the language used is English, either because copies must go to head offices located outside Quebec, or because of technical factors involved in specifications. Table XII.3 summarizes practices regarding the language used in written or printed forms. A three-way distinction is made between (1) order forms and conditions of purchase (which can be standardized and, if warranted, printed in both French and English); (2) specifications (which reflect technological constraints to a greater degree); and (3) miscellaneous correspondence (which is usually specific to a given purchase and can therefore offer more flexibility in the selection of language).

Most firms use only English in order forms (27 out of 41) and conditions of purchase forms (26 out of 41). A slightly higher proportion (29 out of 41) use only English in specifications. In miscellaneous correspondence, most firms (25 out of 41) adapt well, using either English or French.

Only one firm (regional FCQ) uses only French in its forms and specifications. However, another FCQ firm (also regional) uses only English in order forms and conditions of purchase forms. In all other cases, FCQ firms use both languages. Among ForFrQ firms, none use only French but half use only English.

ECQ, ECC, USQ, and USC firms are inclined to use English only for all documents except miscellaneous correspondence. In each of these groups (except USC), however, there is at least one firm that uses both languages.

## *Part 2. Marketing*

### *A. Introduction*

In marketing, as in any other area, the policies and practices of a firm are determined partly by the type of market in which it operates, and partly by the attitudes, habits and methodology of its management. The selected market (that is, the kind of products the firm elects to manufacture and sell, and the kind of buyers to whom they are sold) is itself not a factor which is beyond the control of the firm and accepted by it as given and fixed. Normally, the selected market is partly determined by external factors such as existing business opportunities, and partly determined by the firm itself in such a way as to make the best use of the resources it has at its command. The market may be defined geographically, or by type of product, or by type of buyer. A firm's resources include its technology and its access to capital funds, as well as to labour, materials and energy.

When discussing the business opportunities which exist, we should, to be more precise, consider only those opportunities which management *perceives* to exist or, within that range, those opportunities which it elects to pursue. The latter determinant is more meaningful in an operational sense and we note, in selecting it, that we have progressed from external to internal influences. Thus the kind of business in which a firm engages, and its extent (defined for present purposes in a marketing framework) may reflect ethnic, cultural, or language differences between management groups as well as economic or material considerations.



Table XII.3

Purchasing: Language used in written communication with suppliers

Ownership- location type	Language used	Type of written document (no. of firms using)			
		Order forms	Conditions of purchase forms	Specifications	Miscellaneous correspondence
FCQ	English only	1	1	-	-
	French only	1	1	1	-
	Both languages	4	4	5	6
ECQ	English only	11	10	12	2
	French only	-	-	-	-
	Both languages	2	3	1	11
ECC	English only	3	3	3	2
	French only	-	-	-	-
	Both languages	1	1	1	2
ForFrQ	English only	1	1	2	-
	French only	-	-	-	-
	Both languages	2	2	1	3
UKQ	English only	2	2	2	2
	French only	-	-	-	-
	Both languages	3	3	3	3
USQ	English only	6	6	7	7
	French only	-	-	-	-
	Both languages	1	1	-	-
USC	English only	3	3	3	3
	French only	-	-	-	-
	Both languages	-	-	-	-
Total no. of firms using	English only	27	26	29	16
	French only	1	1	1	-
	Both languages	13	14	11	25
		41	41	41	41

*B. The Pattern of Sales*

Table XII.4 shows the percentage breakdown of sales of the sample firms in each ownership-location group by type of purchaser (namely: industrial buyers, the general public, government and institutions, construction and building, and other buyers). Table XII.5 shows the percentage breakdown by region, including exports to the United States and to other countries. It should be noted that these and all

Table XII.4

Marketing: Percentage breakdown of sales\* by type of purchaser (all firms)

Ownership-location	No. firms	Industrial sales	General public	Government and institutions	Construction and building	Other
FCQ	6	12.4	75.0	4.2	8.3	0.0
ECQ	13	58.0	26.6	4.6	5.1	5.7
ECC	4	24.1	67.9	5.4	1.3	1.3
ForFrQ	3	34.3	27.3	25.0	13.3	0.0
UKQ	5	39.0	57.0	0.8	1.0	2.2
USQ	7	41.7	32.5	8.2	2.0	15.5
USC	3	22.6	56.5	8.1	10.3	2.4
Total	41	41.4	42.0	6.2	5.3	5.1

\*Not weighted as to sales value (sales of all sample firms are given equal weight). This applies to all tables in this section.

other tables in the present section are designed to show the relative importance of various parts of the market to sample firms, irrespective of the size of the firms. Therefore total samples of all sample firms, whether small or large, are given equal weight.

One of the chief functions of these tables is to assist us in defining our sample. That is, to the extent that a firm's market is important in determining its policies and practices in any area, the breakdown given here will help to "explain" the characteristics of firms in the various ownership-location groups, documented in other chapters. Also, our selection criteria are reflected in the approximately equal emphasis given to sales to industrial buyers and to the general public (41.4 and 42.0 per cent, respectively, for all sample firms), since these figures correspond quite closely to the split by product type between industrial materials and consumer goods.

Within these limits, however, the breakdown of sales for each ownership-location group does give some indication of the market opportunities perceived and grasped by management of firms in that group. In Table XII.4, we note that FCQ firms place more emphasis on sales to the general public (75.0 per cent) than to industrial buyers (12.4 per cent). There are, of course, some French-language firms engaged in heavy industry, but in general, the drift so far has been towards consumer goods, where the requirements of technology and capital funds are not so stringent, and where economies of scale are not so pronounced. As shown in Table XII.5, FCQ firms do nearly 54 per cent of their business (well above average) within the province of Quebec. This is partly due to the relatively small size of these firms, but it also reflects the fact that those firms engaged in

Table XII.5  
Marketing: Percentage breakdown of sales by region (all firms)

Ownership- location	Quebec	Atlantic provinces	Ontario	Western provinces	Total Canada	United States	Elsewhere	Total exports
FCQ	53.8	4.9	24.1	10.5	93.4	5.3	1.3	6.6
ECQ	27.3	4.8	32.2	13.5	77.7	15.2	7.1	22.3
ECC	30.3	6.8	43.4	12.3	92.7	2.5	4.8	7.3
ForFrQ	57.3	5.4	18.2	10.2	91.0	5.7	3.3	9.0
UKQ	40.1	4.2	27.8	8.8	80.9	12.1	7.0	19.1
USQ	25.7	4.5	35.1	14.5	79.7	13.0	7.2	20.3
USC	26.3	8.4	38.3	24.7	97.8	0.8	1.4	2.2
Total (percentage)	33.5	5.2	31.7	13.4	83.8	10.7	5.5	16.2

selling consumer goods (which are in the majority) are doubtless taking advantage of their better understanding of French-speaking buyers.

Sales of ECQ firms show an opposite tendency, mainly because the same factors are acting on them in an opposite direction. The proportion of their sales to industrial buyers, most of whom are English-speaking, is higher than for any other ownership-location group (58.0 per cent versus 41.4 per cent for all sample firms), while their sales in Quebec are significantly below average (27.3 per cent versus 33.5 per cent). ECQ firms are also the most export-oriented group (22.3 per cent of total sales versus 16.2 per cent for all sample firms and 6.6 per cent for FCQ firms). Firms in this group comprise several heavy industry and resource-based enterprises, as well as some manufacturers of nationally-known consumer products.

The distribution of sales of USQ firms is very similar to that of ECQ firms, for much the same reasons. That is, because of their access to technology and capital funds, these firms tend to concentrate on products which involve manufacturing processes that are capital-intensive. Most industrial goods fall into this category, although many consumer goods (including those offered by firms in this segment of the sample) involve highly sophisticated manufacturing techniques as well. Thus it is not surprising to note that, among USQ firms, sales to the general public account for only 32.5 per cent of total sales, on average, compared to 42.0 per cent for all sample firms. Industrial sales account for 41.7 per cent, and to this we could add (because of the nature of the product) an additional 15.5 per cent of sales to "other" buyers. Again, as with ECQ firms, sales in Ontario are larger than in Quebec (35.1 per cent versus 25.7 per cent) despite the fact that these firms are Quebec-based, while exports, at 20.3 per cent, are well above average and second only to ECQ firms.

English-language firms based elsewhere in Canada but having operations of significant size in Quebec (ECC and USC) sell more to the general public than to industrial buyers (ECC 67.9 and 24.1 per cent, respectively; USC 56.5 and 22.6 per cent, respectively), but this is largely owing to the operation of our sampling criteria. In general, firms manufacturing consumer goods tend to disperse their manufacturing operations in accordance with the geographic distribution of the market because of the importance of transportation costs and market servicing requirements. This means that our sampling requirement, that firms should have significantly large operations in Quebec, has led to the selection of a relatively large proportion of consumer goods producers in these two ownership-location groups. Even so, among USC firms particularly, the consumer goods offered tend to be very technically-oriented. As shown in Table XII.5, firms in both groups sell less than a third of their output in Quebec (30.3 per cent for ECC, 26.3 per cent for USC) and, in common with most Canadian producers of consumer goods, export very little (7.3 per cent of ECC sales, and only 2.2 per cent of USC sales).

Among ForFrQ firms, a slightly higher proportion of sales is made to industrial buyers than to the general public (34.3 per cent versus 27.3 per cent), while sales to governments and institutions, at 25.0 per cent, are much higher than for any other ownership-location group (Table XII.4). Over half (57.3 per cent) of all sales are made in Quebec (Table XII.5). Although, as we have said, the internal language of business of firms in this group is mixed, the incidence of English, which is higher than might be expected, may be partly attributed to the importance of sales to industrial buyers, as well as the requirements of manufacturing technology.

The sales of UKQ firms to industrial buyers, at 39.0 per cent, are nearly as high as the average for all sample firms, but sales to the general public are much higher, at 57.0 per cent. The difference is the relatively small proportion of sales to all other buyers. In line with the preponderance of consumer goods manufacturers, sales in Quebec are relatively high, at 40.1 per cent. Exports, consisting mainly of industrial materials, are third highest, at 19.1 per cent.

In summary, we note that the Quebec market is relatively significant for FCQ, ForFrQ and UKQ firms, and that the consumer market is relatively important for FCQ, ECC, UKQ and USC firms. Combining these to obtain a very rough measure of the relative significance of the French-speaking market, we find that the only two groups of firms which occur in both lists above are FCQ and UKQ.

If we restrict the analysis to firms principally engaged in the manufacture of consumer goods,\* we can obtain a somewhat better estimate of sales to French Canadian buyers, based on the proportion of total sales taken by buyers in Quebec, the reported percentage distribution of sales between Montreal and the rest of Quebec, and estimates of the proportion of French-speaking buyers in each of these two regions. Table XII.6 lists the 15 consumer goods manufacturers in our sample, ranked in order of estimated percentage of total sales going to French Canadian buyers in Quebec, with the ownership-location group indicated for each. There are at least two firms of each ownership-location group in the list, except USC (one) and ForFrQ (none). If we take the sum of the two highest ranks for each group, we can obtain a rough summary of the table as follows (the lower the index number, the greater is the relative importance of sales to French Canadian buyers): FCQ four, ECQ eight, ECC 12, UKQ 15, USQ 26. Once again, FCQ firms lead the list, although UKQ firms now stand below ECQ and ECC firms. It will be remembered that the first measure related to all firms, while the second includes only manufacturers of consumer goods.

---

\*This group (as defined in Chapter II) comprises all those firms which sell over 75 per cent of their total output (measured by sales value) to the general public. "Industrial goods" producers sell over 75 per cent of their output to industrial buyers, and all other firms are classified, for these purposes, as "mixed."



Table XII.6

Relative importance of sales to French Canadian buyers

## 15 consumer goods manufacturers

Rank	Ownership-location group	Sales to French Canadian buyers as percentage of total
1	FCQ	77
2	ECQ	63
3	FCQ	54
4	UKQ	47
5	ECC	36
6	ECQ	34
7	ECC	32
8	FCQ	30
9	ECC	27
10	FCQ	27
11	UKQ	26
12	USQ	24
13	USC	22
14	USQ	21
15	ECQ	5

A final measure of the influence of language or ethnicity in the markets served by the sample firms can be obtained by examining the distribution of Quebec sales between Montreal and the rest of Quebec. In comparison with the rest of the province, Montreal has a higher percentage of English-speaking residents, and bilingualism is more common. In addition (particularly with respect to industrial materials), most businessmen regard Montreal as a city of national, not provincial, significance.

Table XII.7 shows, for each ownership-location group, the percentage of total sales made in the province of Quebec (repeated from Table XII.5), together with the percentage of total Quebec sales accounted for by the Montreal region. Separate columns show data for firms that are primarily engaged in the manufacture of consumer goods, and those that are primarily engaged in the manufacture of industrial goods. Six of the 41 firms fall in the midrange ("mixed"), and they are not shown separately.

Looking first at the columns showing sales in Quebec as a percentage of total sales, we are struck by the far greater importance of Quebec as a market for consumer goods than for industrial goods. For every ownership-location group, Quebec accounts for a higher proportion of the sales of consumer goods producers than it does for producers of industrial materials and equipment. Thus, the 15 consumer goods manufacturers rely on Quebec for 41.7 per cent of their sales, while the 20 industrial goods manufacturers sell only 28.2 per cent

Table XII.7  
Relative significance of sales in the Montreal region

Ownership- location group	All firms		20 industrial goods manufacturers		15 consumer goods manufacturers	
	Quebec as per cent of total	Montreal as per cent of Quebec	Quebec as per cent of total	Montreal as per cent of Quebec	Quebec as per cent of total	Montreal as per cent of Quebec
FCQ	53.8	43	52.6	64	54.4	32
ECQ	27.3	43	21.4	57	41.1	46
ECC	30.3	38	8.0	*	37.7	38
ForFrQ	57.3	33	*	*	*	*
UKQ	40.1	51	17.5	34	45.3	57
USQ	25.7	57	22.8	48	27.2	50
USC	26.3	54	*	*	*	*
Total	33.5	45	28.2	48	41.7	43

\*Insufficient information (included in Total).

of their output in Quebec. The latter group, however, sell an average of 28.7 per cent of their output in export markets.\*

The Montreal region accounts for 48 per cent of total sales of the 20 industrial goods manufacturers in the province of Quebec. The greatest concentration of sales in the Montreal region (64 per cent) occurs among FCQ firms, and this goes a considerable way toward explaining the relatively great importance of bilingualism in such firms. Sales in the Montreal region are also quite significant (57 per cent) for ECQ firms manufacturing industrial goods, although their total sales in Quebec are a much smaller proportion (21.4 per cent) than for FCQ firms (52.6 per cent). The "base" of total Quebec sales is also quite small for UKQ industrial goods manufacturers (17.5 per cent), but it is interesting to note that nearly two-thirds of all Quebec sales are made outside Montreal. It was discovered in earlier sections that bilingualism is quite common in UKQ firms, and that their adaptation to the use of French is relatively high. Apparently one reason for this is the relatively great significance to them of markets in predominantly French-speaking areas of Quebec.

The 15 consumer goods manufacturers sell, on average, 41.7 per cent of their total output in Quebec. Of this, 43 per cent is sold in the Montreal region. UKQ firms in this group (in contrast to UKQ industrial goods manufacturers) concentrate 57 per cent of their Quebec sales in the Montreal region, and this is on top of a relatively high base of sales in Quebec, amounting to 45.3 per cent of the total. For both FCQ and ECC consumer goods manufacturers, sales in Quebec outside of Montreal are over 60 per cent of the provincial total. This seems to support the hypotheses advanced earlier that FCQ firms tend to take advantage of their French-language abilities, and that firms based outside the province tend to adapt to local market conditions. The latter point cannot be verified for USC firms, however, because the data are insufficient. For USQ consumer goods manufacturers, sales in the Montreal region account for half the provincial total, just slightly more than the proportion of Montreal sales by USQ industrial goods manufacturers.

### *C. Advertising*

As noted in the preceding section, the market in which a firm operates is partly determined for it by external factors such as business opportunities, and partly determined by the firm itself in such a way as to make best use of the resources it has at its command. Having examined the market patterns that have been developed in a bilingual-bicultural setting by firms in various ownership-location groups, we

---

\*The figure of 16.2 per cent for exports, shown in Table XII.5, is the average for all 41 firms. The comparable average figure for 15 manufacturers of consumer goods is 8.0 per cent.

can now look at some operational factors. These may give us an indication of the degree of adaptation of these firms to the language characteristics of their customers. Chief among these are their advertising practices (discussed here) and the language ability of their sales personnel (discussed below).

Figure XII.1 shows, for 14 consumer goods manufacturers,<sup>1</sup> the percentage of total advertising expenditures devoted to advertisements in French-language media aimed at the general public,<sup>2</sup> plotted against the estimated percentage of total sales made to French-speaking buyers. Each dot represents one sample firm, and the ownership-location group is shown beside the dot, for reference.

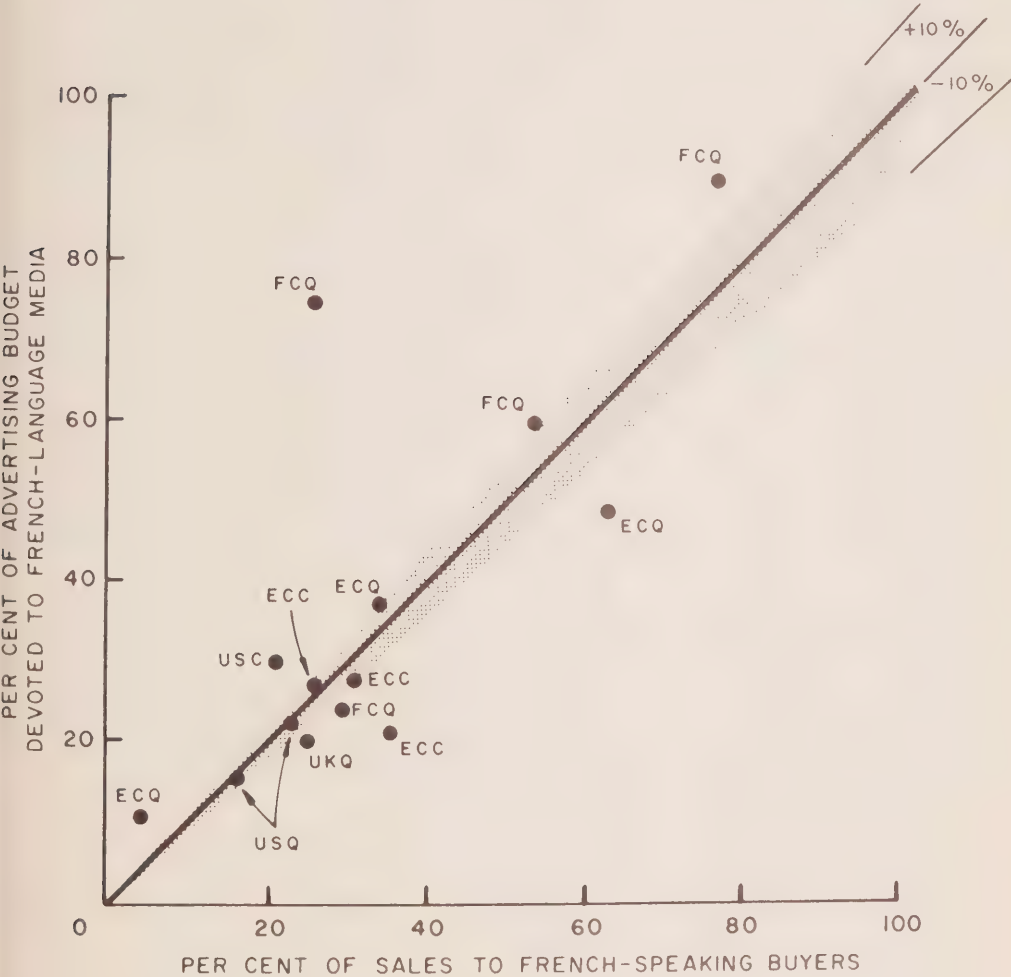
If expenditures on French-language advertising were exactly proportional to sales to French-speaking people, all dots would lie on a 45-degree line extending from the origin. If a firm were devoting less money to French-language advertising than its sales to French-speaking buyers would warrant, the dot representing it would lie *below* the line. Similarly, if a firm were overemphasizing its French-language advertising, its dot would lie *above* the line.

As the chart shows, most of the dots are clustered quite closely around the proportional line,<sup>3</sup> indicating that most firms have adjusted their advertising expenditures to conform well with the pattern of markets facing them.<sup>4</sup> Of the 14 firms, seven are above the line (that is, their expenditure on French-language advertising is more than proportional to their sales to French-speaking buyers) and seven are below. If we postulate a zone (shown on the chart) which allows for 10 per cent "error" above and below the proportional line, we note that five firms lie within the zone, five are above it and four are below it. Of the five firms lying above the zone limit, three are FCQ, one is ECQ, and one is USC. The four firms below the zone limit include one each FCQ, ECQ, ECC and UKQ.

There are two reasons why expenditures on French-language advertising might be higher than the proportion of sales to French-speaking buyers might indicate—at least for English-language firms. One is that our measure is in terms of dollars spent by the firm, not advertising effort perceived by the general public. French-language advertising, which is aimed at a smaller number of people, necessarily involves higher unit costs and may even involve higher total costs, because of the frequent need to reconstruct, or at least translate, an advertising message. English-language advertisements can often make use of material developed in the United States. The second reason is that manufacturers of consumer goods may have begun, within the past five years or so, to increase their selling effort in French Canada in order to take advantage of increasing economic activity and consumer spending power.

Another measure of the degree of adaptation of firms to language and cultural differences in their markets is given by their answer to the question: "Are your advertising messages usually (a) conceived in English and translated into French, (b) conceived in French and

Figure XII.1  
Advertising in French-language consumer media: Per cent of advertising budget devoted to French-language media versus per cent of sales to French-speaking buyers





translated into English, or (c) conceived separately for both languages?" It might be felt that advertising conceived in one language and translated into another could carry with it a "cultural flavour" that would not suit the tastes of people belonging to the other language group. On the other hand, a firm doing most of its business in a unilingual region of Canada, or with affiliates in the United States, may find it difficult and expensive to modify its image by putting out a series of conceptually different advertisements based on a different language or culture. This would be especially true of firms that benefit from "spill-over" advertising by the parent company in magazines and television in the United States, which is received by Canadians of both language groups.

By this measure also, the great majority of the sample firms gave evidence of having adapted well to the characteristics of their markets. That is to say, they are more interested in maximizing sales volume than in asserting any one language or culture. Among consumer goods manufacturers, nearly all of those without external constraints either conceive their advertisements separately or, better still, conceive advertisements and advertising campaigns in such a way that the same message can be expressed in either language. This is not too surprising, since very often much of the work is done by advertising agencies which have both French- and English-speaking creative people working for them. Bilingual-bicultural advertising does cost more, though how much more cannot be estimated. However, the expense is thought to be worthwhile in terms of increased sales.

Consumer goods manufacturers operating under external constraints such as strong links with parent companies outside Canada, and those that sell most of their output in unilingual areas of Canada, tend to conceive their advertisements in their first language (either English or French) and translate or adapt the message to the other language. About two-thirds of the industrial goods manufacturers (14 out of 20) follow this practice also, while the remainder conceive separate advertisements in each language.

The responses of 41 sample firms to the question above are summarized in Table XII.8. It should be stressed that many firms (especially consumer goods manufacturers) added that they were not comfortable in any of the extreme positions in which the categories used in the question appeared to put them. Most stated that they did not (and could not) simply "translate" their advertising. Rather, it was "adapted," or "modified," or "interpreted," after having been originally developed in one language or the other.

Four out of six FCQ firms conceive their advertising in French and then translate or adapt it to English. The apparent preference for the language of ownership is higher here than for any other ownership-location group except USC, where two out of three firms conceive advertising in English and translate into French. The reasons are the same: both groups of firms sell most of their output to buyers who speak their own language. It is interesting to note, however,

Table XII.8  
Marketing: Language of conception of advertising

Ownership- location group	Number of firms	Advertising conceived in English trans. into French*	Advertising conceived in French trans. into English*	Advertising conceived separately in each language	Firm does not advertise
FCQ	6	2	4	0	0
ECQ	13	6	0	6	1
ECC	4	2	0	2	0
ForFrQ	3	2	0	1	0
UKQ	5	2	0	1	2
USQ	7	4	0	3	0
USC	3	2	0	1	0
Total	41	20	4	14	3
Type of Product					
Consumer goods	15	4	3	7	1
Industrial goods	20	13	1	4	2
"Mixed" cons. & ind. goods	6	3	0	3	0
Total	41	20	4	14	3

\*Most firms replied that they do not simply "translate" their advertising, but rather "adapt" or "interpret" it into the other language.

that the remaining two FCQ firms do not follow the middle-of-the-road practice of conceiving advertising separately in each language. Rather, they start with English and then translate into French. For both these firms, sales outside Quebec account for more than half of the total volume. Two out of three ForFrQ firms also use English in the initial stages of developing their advertising.

Among the 14 firms which develop separate, though similar, advertising messages in each language, six are ECQ, three are USQ and two are ECC. In each group, firms following this practice account for about half of all firms in the sample.

Similarly, seven out of 15 consumer goods manufacturers and three out of six manufacturers of *both* consumer and industrial goods develop advertising separately in each language.

Among the 20 industrial goods manufacturers, however, adaptation to French is not as high, owing principally to the dominance of English as the language of business in the industrial sector, even in Quebec. Thirteen firms develop advertising in English first and then usually (but not always) translate or adapt the message to French.

#### *D. The Language Ability of Sales Personnel*

Although advertising does much to create and maintain a company's image, the link which it provides between the company and its environment is necessarily indirect. More direct contacts are provided by the company's representatives, and chief among these, in the marketing area, are salesmen. Thus, the language ability of sales personnel offers a good measure of the degree of adaptation of the firm toward language differences among buyers of its products.

A salesman must be bilingual if the language of his customers is other than that used within the firm, and/or if his customers belong to both language groups. This is to be expected, and the tables in this section document the fact (if documentation is necessary) quite well. What is perhaps more interesting is the extent to which unilingual French- or English-speaking sales personnel are used in various regions in Canada.

Table XII.9 shows the language ability of sales personnel in each region, employed by all the sample firms. The total number of people involved (5,033) is close to the total number of employees earning over \$5,000 per annum employed in the marketing functional area (5,044), whose characteristics and job requirements were analyzed in Chapter VI (Current Conditions: Salaried Employees). To some extent this is coincidental, since we are now concerned only with sales personnel (this excludes other jobs in the marketing area), without restriction as to income level.

As the table shows, just over 10 per cent of all salesmen in Ontario and the Atlantic provinces, and 86 per cent of all salesmen in Quebec, are bilingual. Over 11 per cent of the salesmen employed in Quebec are unilingual English. All but one of the small number of salesmen who can speak only French are confined to Quebec, where they constitute less than 3 per cent of all sales personnel in the province. In addition to salesmen employed on a regional basis, there are 305 technical specialists and salesmen not assigned to any particular region. Of these, 108, or 35 per cent, are bilingual.

### 1. Differences due to ownership-location group

Subsequent tables in the series XII.10 to XII.16 show the breakdown by region for each ownership-location group. In these, we note that 26 of the 48 unilingual French-speaking salesmen are employed by ECC firms. These people, most of whom sell consumer goods and therefore must maintain close ties with the general public, are further removed from head office than are representatives of ECC firms, for example, and no doubt they report through regional sales managers who are bilingual. Similarly, most salesmen employed by FCQ firms in areas outside Quebec are unilingual English. Within Quebec, FCQ firms employ more unilingual English (16) than unilingual French (four) salesmen, owing mainly to market factors. However, by far the largest proportion (127 out of 147) are bilingual, as they are in all other ownership-location groups.

Table XII.9

Marketing: Language ability of sales personnel

Ownership-location group: All				
Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	304	-	35	339
Quebec	192	47	1,460	1,699
Ontario	1,532	1	172	1,705
Western provinces	957	-	28	985
Technical specialists and salesmen not assigned to any particular region	197	-	108	305
Total	3,182	48	1,803	5,033

Table XII.10

Marketing: Language ability of sales personnel

Ownership-location group: FCQ				
Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	10	-	6	16
Quebec	16	4	127	147
Ontario	46	-	2	48
Western provinces	30	-	-	30
Technical specialists and salesmen not assigned to any particular region	1	-	5	6
Total	103	4	140	247

Table XII.11

Marketing: Language ability of sales personnel

Ownership-location group: ECQ				
Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	51	-	7	58
Quebec	77	2	561	640
Ontario	498	-	55	553
Western provinces	235	-	6	241
Technical specialists and salesmen not assigned to any particular region	69	-	21	90
Total	930	2	650	1,582



Table XII.12

Marketing: Language ability of sales personnel

Ownership-location group: ECC				
Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	91	-	9	100
Quebec	17	26	206	249
Ontario	291	-	12	303
Western provinces	186	-	2	188
Technical specialists and salesmen not assigned to any particular region	-	-	-	-
Total	585	26	229	840

Table XII.13

Marketing: Language ability of sales personnel

Ownership-location group: ForFrQ				
Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	22	-	1	23
Quebec	6	10	48	64
Ontario	49	-	1	50
Western provinces	67	-	-	67
Technical specialists and salesmen not assigned to any particular region	22	-	24	46
Total	166	10	74	250

Table XII.14

Marketing: Language ability of sales personnel

Ownership-location group: UKQ				
Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	30	-	5	35
Quebec	2	1	146	149
Ontario	176	1	19	196
Western provinces	68	-	4	72
Technical specialists and salesmen not assigned to any particular region	18	-	32	50
Total	294	2	206	502

Table XII.15

Marketing: Language ability of sales personnel

Ownership-location group: USQ				
Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	20	-	6	26
Quebec	48	2	215	265
Ontario	170	-	73	243
Western provinces	113	-	11	124
Technical specialists and salesmen not assigned to any particular region	23	-	14	37
Total	374	2	319	695

Table XII.16

Marketing: Language ability of sales personnel

Region	Ownership-location group: USC			
	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	80	-	1	81
Quebec	26	2	157	185
Ontario	302	-	10	312
Western provinces	258	-	5	263
Technical specialists and salesmen not assigned to any particular region	64	-	12	76
Total	730	2	185	917

There is only one unilingual French-speaking salesman employed outside Quebec (in Ontario, by a UKQ firm) but, as noted above, the number of unilingual English-speaking salesmen employed in Quebec is relatively high. The proportion is over 10 per cent for all ownership-location groups except ECC and UKQ, and rises as high as 18 per cent in USQ firms.

## 2. Differences due to type of product

Reference to Table XII.17 shows that most of the unilingual English salesmen employed in Quebec (104 out of 192), represent industrial goods manufacturers. For these people, who are in contact with industrial buyers and not the general public, the language of business is English. In the same group, only six are unilingual French. Even so, most salesmen of industrial goods in Quebec (368 out of 478, or 77 per cent) are bilingual. The table also shows that about one-fifth of all industrial goods salesmen in Ontario (101 out of 512) and the Atlantic provinces (10 out of 49) are bilingual, while among technical specialists and salesmen not assigned to any region, 38 per cent (53 out of 139) are bilingual.

The pattern of language ability of consumer goods salesmen, shown in Table XII.18, corresponds much more closely with regional language patterns, as might be expected. In Quebec, the number of salesmen who speak only French (30) is greater than the number who speak only English (22). By far the greatest number, however (783 out of 835, or 94 per cent), are bilingual. The same tendency is apparent among technical specialists and salesmen not assigned to any particular

Table XII.17

Marketing: Language ability of sales personnel (Ownership-location group: All)

20 industrial goods manufacturers				
Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	39	-	10	49
Quebec	104	6	368	478
Ontario	411	-	101	512
Western provinces	209	-	17	226
Technical specialists and salesmen not assigned to any particular region	86	-	53	139
Total	849	6	549	1,404

Table XII.18

Marketing: Language ability of sales personnel (Ownership-location group: All)

15 consumer goods manufacturers				
Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	137	-	17	154
Quebec	22	30	783	835
Ontario	643	-	32	675
Western provinces	350	-	5	355
Technical specialists and salesmen not assigned to any particular region	20	-	41	61
Total	1,172	30	878	2,080

Table XII.19

Marketing: Language ability of sales personnel (Ownership-location group: All)

Six manufacturers of both industrial and consumer goods ("mixed")

Region	Number of salesmen qualified to sell in:			
	English only	French only	Both languages	Total
Atlantic provinces	128	-	8	136
Quebec	66	11	309	386
Ontario	478	1	39	518
Western provinces	398	-	6	404
Technical specialists and salesmen not assigned to any particular region	91	-	14	105
Total	1,161	12	376	1,549

region. Of these, 41 (67 per cent) are bilingual and 20 (33 per cent) are unilingual English. In regions outside of Quebec, the proportion of salesmen who speak only English is dominant (89 per cent in the Atlantic provinces, 95 per cent in Ontario, and 98 per cent in the Western provinces).

Although, in our sample, the number of consumer goods producers is smaller than the number of industrial goods producers (15 versus 20), the total number of salesmen they employ is significantly greater (2,080 versus 1,404), reflecting the greater emphasis they must place on sales effort. The six firms classified as "mixed" (more than 25 per cent, but less than 75 per cent of their sales are consumer goods) employ the remaining 1,549 salesmen. Predictably, the language abilities of their salesmen fall between the two other groups. The proportion of bilingual salesmen in Quebec, for example, is 80 per cent (309 out of 386), compared to 77 per cent for industrial goods manufacturers and 94 per cent for consumer goods manufacturers. Correspondence with regional language patterns is also quite marked, as it is with salesmen representing manufacturers of consumer goods. The details are shown in Table XII.19.





Previous chapters have examined the extent to which the sample firms adapt their linguistic practices to the language of their employees, their customers and their suppliers. In the present chapter, we shall look at some practices affecting shareholders.

In this context, it must be noted, first, that not all sample firms are public corporations. Some are subsidiaries of foreign or other Canadian corporations, and some are private companies. Even among those registered as public corporations, ownership of shares may be restricted to a relatively small number of individuals, and the annual meeting, for example, may be a fairly private affair. From many points of view, therefore, comparisons are difficult and the summary tables must be interpreted with caution.

The three areas examined here are: the language used in the annual shareholders' meeting, the language in which the annual report is published, and the language used on share certificates. From a public relations point of view, the annual report has the greatest impact, and share certificates have the least.

#### *A. Annual Reports*

Table XIII.1 shows, for firms in each ownership-location group, the language or languages in which the annual report is published. Of the 35 firms for which this question is applicable, 14 publish separate French and English versions and eight others publish a combined, bilingual report.

Executive officers of sample firms have reported to us that the public seems to prefer separate versions. Combining both English and French texts in one booklet apparently makes it difficult to read, or too bulky, or both. From the point of view of the company, the combined version would be preferred because it costs less to print and mail and, above all, it requires much less administrative effort to

Table XIII.1

Shareholder relations: Language used in the annual report

Language	Ownership-location group							Total no. of firms
	FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only	-	3	1	1	1	4	2	12
French only	1	-	-	-	-	-	-	1
English and French (separate copy for each)	3	5	1	1	2	1	1	14
English and French (combined in same copy)	2	3	1	-	2	-	-	8
Total no. of firms	6	11	3	2	5	5	3	35

keep mailing lists up to date. Since shareholders continually come and go, most firms offering separate versions face the task each year of estimating how many copies will be required in English and how many in French. It is common practice to invite the shareholder to ask for a version in the other language if he so desires, and often a prepaid postcard is provided for this purpose. Whenever such a request is received, the information is kept on file and the following year the appropriate version is mailed the first time. In the case of new shareholders, a guess as to his preferred language may be made for each individual, based on his name and address, or else a copy of one version (usually English) may be sent to all new names on the list along with the postcard insert.

The problem is compounded by the fact that some financial terms are not yet standard in French, and French-speaking shareholders will ask for the English version for that reason. An example of the difficulties which can be encountered in trying to forecast the shareholders' preferences was given to us by executives of one English-language firm that had recently decided to publish its annual report in French as well as in English. The report was translated and some 1,500 copies were printed in anticipation of requests for the French version. Requests were received for only five. The cost of translation was quite moderate, but printing costs were nearly double those of the previous year.

Only one firm (FCQ) publishes its annual report only in French. Firms which publish only in English are found in all other ownership-location groups (including ForFrQ); this is the most usual practice in USQ and USC firms. Separate French and English versions are published by firms in all ownership-location groups (and this is the

dominant practice for FCQ and ECQ firms), while combined bilingual reports are offered by FCQ, ECQ, ECC and UKQ firms.

### *B. The Annual Shareholders' Meeting*

The selection of the language used at the annual shareholders' meeting reflects, of course, not only the practices of officers of the corporation, but also the language abilities and preferences of the shareholders who attend the meeting. This is especially true for some FCQ firms which have only French-speaking shareholders, and for some English-language firms with head offices outside Quebec, which are likely to have only English-speaking people who live nearby, attend their meetings. In the latter case, there may be some shareholders who live in Quebec, but unless their holdings are quite large, or the issues to be raised at the meeting are extraordinary, they are unlikely (whether they are French- or English-speaking) to travel a great distance to attend the meeting.

Table XIII.2 shows that, of the 37 firms for which this question is relevant, 25 use only English at the annual shareholders' meeting. Six of these firms (three ECC and three USC) are located outside Quebec. Five firms (four FCQ and one ForFrQ) use only French, and one FCQ firm assigns equal importance to both languages.

In an effort to measure adaptation to the other language if there are shareholders of that mother tongue present at the meeting (it is unlikely the effort would be made if this were not so), we also asked firms to report whether their practice was to conduct the meeting mainly in one language, but include a short presentation in the other. The table shows that five firms (three ECQ, one ForFrQ and one UKQ) conduct the meeting principally in English with a short presentation in French, and one FCQ firm follows the opposite practice. Questions from the floor are usually answered in the language in which they are put.

### *C. Share Certificates*

Table XIII.3 shows that, of the 38 firms able to reply to our question on the language in which share certificates are printed, 27 use only English, two use only French, eight combine English and French texts on a common certificate, and one offers separate French or English versions.

One FCQ firm is among those offering certificates only in English. Two other FCQ firms use only French, and three use both English and French on the same certificate. Among ForFrQ firms, three use only English and one offers bilingual share certificates. The quite widespread use of English, either alone or combined with French, by French-language firms is interesting. There may be advantages in

Table XIII.2

Shareholder relations: Language used in conducting the annual shareholders' meeting

Language	Ownership-location group							Total no. of firms
	FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only	-	8	3	1	4	6	3	25
Mainly English	-	3	-	1	1	-	-	5
English and French equally	1	-	-	-	-	-	-	1
Mainly French	1	-	-	-	-	-	-	1
French only	4	-	-	1	-	-	-	5
Total no. of firms	6	11	3	3	5	6	3	37

Table XIII.3

Shareholder relations: Language used in printing share certificates

Language	Ownership-location group							Total no. of firms
	FCQ	ECQ	ECC	ForFrQ	UKQ	USQ	USC	
English only	1	8	3	3	3	6	3	27
French only	2	-	-	-	-	-	-	2
English and French (separate certificates)	-	1	-	-	-	-	-	1
English and French (combined in same certificate)	3	2	-	1	2	-	-	8
Total no. of firms	6	11	3	4	5	6	3	38

cost and convenience in using certificates printed only in English, but these would be minor. It is unlikely that the language used in printing share certificates would have any effect in attracting shareholders whose mother tongue is different from that of ownership.

All ECC, USQ and USC firms use only English. In firms of other ownership-location groups, the proportion offering bilingual certificates is two in 11 for ECQ, two in five for UKQ, one in four for ForFrQ, and three in six for FCQ.



In summary, remembering the caution with which we must interpret the figures, we note that bilingualism is quite commonly used in annual reports, while English is dominant in share certificates. At annual shareholders' meetings, the language used tends to be the language of ownership. Bilingualism is much less common here than in the selection of directors and officers of the corporation (discussed in Chapter V).



In the preceding chapters we have attempted to measure and document the use of French and the employment of French-speaking people in Canadian manufacturing firms. Our findings have covered many facets of industrial activity. In view of this, it may be thought that the subject of the present chapter—the use of French in business—has already been covered. It will be useful, however, to review some of our more general and less quantifiable findings. These are grouped under two headings: "Regions and Functions where French Can Be the Working Language"; and, "The Opportunity to Do Effective Work."

#### *A. Regions and Functions Where French Can Be the Working Language*

Our study has shown that the principal factors encouraging the use of French in business arise in three main functional areas: employee relations, public relations and marketing. In addition, these factors will encourage the use of French rather than English only in those cases where the majority of the employees, as well as the social and market environment, are French. Reference to the model depicted in Figure IV.1 (Chapter IV) and the discussion accompanying it, shows that all other factors encourage the use of English.

It follows that French can be used as the working language only in those operations in Quebec and adjacent bilingual-bicultural regions that (1) can be staffed by French-speaking people, and (2) are isolated from non-French-speaking outside influences.

There seems to be a tendency for an organization (or any unit within it) to use only one language. Because of the balance of factors, that language is usually English at the upper management level and French (sometimes) at the wage-roll level. Between the two areas, ensuring communication, is the "bilingual belt." Most often, the bilingual belt is centred around the foreman or plant supervisor. In order to test for its location, we asked the following questions in

our interviews: "How high can a unilingual French-speaking employee rise in your company?" and, "How high can a unilingual English-speaking employee rise?"

In most cases, unilingual French-speaking employees are able to rise to the level of foreman. Beyond that point, the individual's promotion is not necessarily blocked, because by the time he reaches the foreman level he is likely to have become bilingual. In the marketing function, salesmen can often operate only in French, but sales managers, even at the regional level, generally must be bilingual.

With a few exceptions, unilingual English-speaking employees can rise right to the top of an organization, but there is an interesting paradox here, for often an employee at the lower levels who is unable to speak French cannot get started.

There are some differences due to region. In Quebec outside of Montreal, French unilingualism is possible in a number of instances. In Montreal, French can be used alone only in unusual situations, as can English. The emphasis in Montreal is on the use of both languages. In other parts of Canada, English can be used alone (and generally is) in nearly all cases.

In FCQ firms, a unilingual French-speaking employee can reach such positions as plant manager, chief accountant, or (most often) foreman. However, people in technical work, sales, and middle and senior management must be able to speak English. Unilingual English-speaking people are seldom employed. When they are, they occupy specialist or (in one or two instances only) senior management positions that involve little contact with other employees except through bilingual intermediaries.

In English-language firms, the opportunities for advancement of unilingual French-speaking employees are the same as in FCQ firms. However, opportunities open to English-speaking employees are changing rapidly in plants and offices in Quebec. Unilingual English-speaking people at middle management levels can still, in most cases, move on to more senior positions, although many of them are nevertheless taking French-language courses. Younger people coming in, who must be able to move between plants throughout the country as they gain the experience needed for further promotion, are expected to become bilingual either before or shortly after they move to jobs in plants in Quebec. It is anticipated, therefore, that in time all English-speaking managerial staff will be bilingual. The president of one ECQ firm estimated that his successor—or at least the next but one—will have to be fluently bilingual to hold the position.

Executives of firms with head offices outside Quebec make the same estimate of future requirements for senior management of their Quebec operations. In many firms, the men at the top level in Quebec are already bilingual. But it is not felt to be as important for senior management at head office to speak French. To the extent that these

people have done their "tour of duty" in Quebec plants on their way up, they will be bilingual (assuming they have not subsequently lost the ability), but otherwise they are not required to speak French.

The effect of these changing requirements in English-language firms has been to move the bilingual belt upward, over the years, from wage-roll to foreman level, and from there (more recently) to plant supervision and management. In the marketing area, the bilingual belt is at the level of salesman or sales manager, depending on the structure of the market and the type of buyers involved.

A very small number of plants and offices in Quebec operate exclusively in French. Particular conditions of markets, technology or reporting and information systems within the organization, will determine at what level, and in what functions, contact must be made with the world outside, and this is where the ability to use English becomes mandatory.

Within any one unit or work group, therefore, bilingualism is possible, but it may be an unstable condition. Any change in the relative importance of factors encouraging the use of French or English will tend to upset the bilingual balance, and the working language within the group will become either all French or all English. The shifts in the location of the bilingual belt over time are evidence that such changes are taking place, and the fact that it has shifted upward through most company organizations within the last ten years is evidence of the increasing importance of French in business in Quebec.

Wherever the forces at work within an organizational unit make bilingualism necessary, the bilingual belt comes into being, usually with little effort or deliberate action. Created in this manner, it is the least expensive way of ensuring communication, and it permits the most efficient utilization of human resources in a bilingual-bicultural environment.

If the normal balance of language factors tends to result in unilingualism, however, any attempt to induce or retain the use of both languages is bound to reduce operating efficiency, since under these circumstances, effort and attention are being focussed on the use of language, and not on efficient allocation of resources. This may not necessarily be out of line with company policy, but a policy having as its objective the encouragement of the use of any given language must recognize its effect on costs, and a corresponding decision must be made that the additional cost is worthwhile.

#### *B. The Opportunity to Do Effective Work*

Taking our lead from comments made by senior French Canadian executives in both English-language and French-language firms, we are inclined to emphasize, not language *per se* but the opportunity to do competent, useful work, and the opportunity to make a good impression



on one's superiors—as well as the opportunity for promotion (which should follow the first two).

Translated into terms meaningful to the firm, what we are referring to is, once again, efficient utilization of human resources and its necessary corollary, good communication. In particular, the extent to which either French or English is used in any given functional area or work group should be determined only by the extent to which difficulties in communication must be overcome.

We believe that more emphasis should be given to the use of written French. It appears that most firms are concentrating at present, on the use of spoken French, which is much more difficult to master.

Executives of most English-language firms often complain that they have encountered great difficulty in attracting and retaining young French Canadian graduates in engineering and commerce. They know that recent graduates often leave the company because the English-speaking work environment does not suit them. From the point of view of the young French-speaking employee, the problem is clear: the work environment may be new and strange to him (it is also new and strange to his English-speaking colleague, but he does not recognize this), and the French Canadian, if he is not fluently bilingual, has the additional handicap of an unfamiliar language. He is, normally, very anxious to make a good impression, but he knows that his good ideas look very dull when they emerge in grammatically poor English. Perhaps he could write a report that would sparkle in French. In English, it looks much less perceptive and imaginative.

Typically, the new employee's supervisor is also in a difficult position, if he is English-speaking. He may have been taking some courses in spoken French, but he still cannot communicate effectively. Within a few months, the young French Canadian, working in an English environment has probably picked up enough spoken English to carry on a conversation quite well, and he is usually more than glad to practice his English. But his written reports are still awkward and he feels that his performance still looks poor—especially to senior management people whom he does not meet frequently and who, he knows, are evaluating him chiefly on the basis of his written reports.

Some English-language firms encourage their French-speaking employees to write reports in French if they so desire, and we believe this is a good policy. English-speaking executives almost always know some French, and can read it much better than they speak it. Fluency is not a factor here, as it is in spoken French. If he encounters any difficulty in understanding the text, the English-speaking executive can always consult a dictionary in the privacy of his office. Of perhaps greater importance is the fact that the young French-speaking staff member is able to make the best showing he can.

Besides the information gathered in interviews, the writer has had some experience in the use of written French reports in his teaching in the Graduate School of Business at McGill University. About

one-third of the people studying for the Master of Business Administration degree are graduates of French-language universities, and in the early part of the two-year programme, a number of them take advantage of the university's policy of permitting the use of French in written reports and examinations. The difference between most students' written work in English and in French is significant. Usually, by the end of the two-year period, all students elect to write in English, although the option of writing in French is still open to them. Many French-speaking students have remarked that the fact they could write in French if they so wished removed a psychological barrier, and that this permitted them to concentrate on their studies to a greater extent than they had expected.

When the management of an English-language firm encourages the young French-speaking staff member to do his important work in his own language, it is, in effect, allowing the new employee to make his best showing on his own terms. If a better performance results, then the company is benefiting from its more efficient use of human resources. But there is also an important by-product—mutual respect. The employee who feels he is being evaluated in terms that are fair to him is much more likely to remain with the firm and continue to improve his performance.

We have emphasized the importance of the conditions surrounding the young French Canadian employee because we feel this is the area in which most problems will be found. Certainly, future characteristics of the work force will depend on the current pattern of employment of French- and English-speaking people, and the problem of the availability of educationally-qualified French Canadians can only be solved by increasing the rate of graduation from French-language universities and technical schools. The principal objective of business firms should be to provide an equal opportunity to new French-speaking and English-speaking employees, to do their most effective work. Once this is done—and recognized to be done by all candidates—the problem of "proportional representation" in business should no longer be of consequence.



This study was prompted by the conviction that the problem of bilingualism and biculturalism in Canada has considerable impact on the industrial sector of this country, and vice versa. It is true that most of the discussion of bilingualism and biculturalism is set in terms of cultural and social relationships, generally defined, and these are often thought to be distinct from business. Our starting point here is that relations between employer and employee, superior and subordinate, and buyer and seller, are all particular kinds of social relationships, and that together they add up to an important aspect of social life in Canada. Even more to the point, we have argued that French-speaking Canadians and Canadians having other mother tongues (generally referred to as English-speaking Canadians) can, and often do, remain separate with respect to their churches, schools, theatres and so on, but that they usually have no option but to meet in the marketplace and the workplace. The policies and practices of business firms, which organize these occasions for coming together must, therefore, greatly affect (and be greatly affected by) the bilingual-bicultural problem.

We have chosen to study the way in which the policies and practices of large manufacturing firms are affected by (or determined by) factors related to the social and economic environment, and by factors operating within these firms or within the industries to which they belong. The study is carried out at the level of the firm as an organizational unit, not at the level of the employee or customer, nor at the level of society as a whole, although many of our findings may be useful in considering the effect that business policies and practices may have at these other levels.

One of the principal reasons for initiating a study into this area was that, it seemed to us, much of the public discussion of bilingualism and biculturalism in industry tended to focus attention on the extremes of experience, or the unusual cases. These are, after all, the most interesting to consider, but since no information was

available on the "normal" range of conditions, the discussion could hardly be put into perspective, and it was not likely that meaningful conclusions could be reached. We soon realized, therefore, that one of our major objectives must be to measure and document, usually for the first time, what conditions actually are.<sup>1</sup> Only after having established these conditions, which we call the base, or datum, would we be able to examine deviations and differences, and try to find explanations for them.

We have, we believe, established the datum relating to large manufacturing firms operating in a bilingual-bicultural environment, and we have analyzed deviations that appear to be due to the operation of the explanatory factors which we selected.

Our search for factual information has produced interesting results, but it suffers from two drawbacks which can only be overcome by further work and the passage of time. The first is that, when we began, we could not of course know which factors were most important and required the most intensive search. We have a much better idea now. The second drawback is that our study relates only to one period in time. The present work is, in effect, a fairly detailed cross-sectional analysis, but now that we have a better notion of what the important determining factors are we should like to know whether they are changing, and in what direction. With both these points in mind, we should regard this initial effort as a pilot study and a guide for further research.

#### *A. Summary*

The nature of our data suggests that to list our findings in summary form at this point would only be repetitive and would probably not lead to a better understanding of the analysis presented in earlier chapters. Instead, we believe it is preferable to apply some overall measure which would combine our findings in a number of areas and relate them to each other. Such a procedure has the advantage of focussing attention on the system as a whole although it should not be used alone, but only in combination with the more detailed tests developed earlier.

There is a method available that will give us an indication of the relationship between some observed characteristics of sample firms and the explanatory factors which we have selected, and it will also give us some idea of the relative importance, or influence, of each of the explanatory factors. This method involves building a mathematical model, based on multiple regression and correlation analysis that relates variables, corresponding to the measured characteristics of sample firms, to the selected explanatory factors.

(It will be recalled that most of our explanatory factors are not "variables", in the sense that they can take on a number of values, like temperature on a Fahrenheit scale, or dollar value of sales.



Instead, most of them are discrete: they either do or do not apply, and there is no in-between, no variability. Thus, the ownership-location group to which a firm belongs is either FCQ or it is something else, and the location of its head office is either Montreal or it is somewhere else. In order to enable mathematical treatment in the computer programme used to build our model, this condition was handled through the use of "dummy variables" which correspond to each ownership-location group, each region, each income level, and so on. These dummy variables have a value of either one or zero. To identify a person working in personnel, for example, that functional area is given a value of one, in his case, and all other functional areas are necessarily assigned values of zero. This procedure, although it permits computer analysis, has the disadvantage that factors entering the computation must always have extreme values, and interpretation of some standard statistical measures such as correlation coefficients must be approached carefully.)

Using data gathered through our questionnaire, the mathematical model can be used to portray the system and to document it in two important ways. The first, the result of multiple regression analysis, gives a mathematical equation that allows us to "predict" or estimate a given characteristic of sample firms, providing that all the explanatory factors are known. The second, the result of correlation analysis, gives a measure of the extent to which a given characteristic of sample firms is associated with, or "explained" by, one or more of the explanatory factors. In so doing, it gives an indication of the "importance" of each explanatory factor.

Admittedly, the value of the predicting equation is slight in the current context since it is not part of our purpose to draw inferences concerning other firms based on information collected from sample firms. We are primarily interested in studying the sample itself. Nevertheless, the value of the regression coefficients (i.e., the constants in the equation) do give us another measure, to be used along with the correlation coefficients, of the relative importance of each explanatory factor. Also, use of the equation to estimate some of the characteristics of sample firms indicates how satisfactory or how complete our model is, when estimated values are compared with actual values, taken from questionnaire returns.

This exercise, which can be viewed as validation of our model, was carried out with the results shown in Table XV.1. Here, the selected characteristic is the number of salaried French-speaking employees earning over \$5000 per annum and the explanatory factors are as follows:

- Total number of salaried staff earning over \$5000 per annum;
- Six income groups (\$5000-6499, \$6500-7999, etc.);
- Seven ownership-location groups (FCQ, ECQ, ECC, ForFrQ, UKQ, USQ, USC);
- Two scopes of operations (regional and national);
- Three types of produce (consumer goods, industrial materials, mixed);

Whether or not the employee is located at head office;  
 Five locations of operations (Montreal, other Quebec, Ontario, Atlantic provinces and Western provinces);  
 Eight functional areas (manufacturing, marketing, personnel, engineering and research and development, finance and accounting, public relations, purchasing, and other).

It will be noted that, for the sample as a whole, the "predicted" value, or estimate, differs from the actual by only 6.4 per cent. Even closer estimates are obtained for all ownership-location groups except ECQ and USC. In the case of the latter group, sufficient data for testing were available from only two firms and conditions in one of these, for special reasons, differ considerably from the ordinary. Results and comparisons for the USC group, taken alone, therefore cannot be considered typical or relevant. The "estimating error" for ECQ firms, which is nearly 15 per cent, is more significant and it gives further striking evidence of the extent to which firms in this group are pursuing policies and practices which depart from the average, for our model has under-estimated the representation of French Canadians in staff and managerial positions in these firms. Similar, though less extreme, cases of under-estimation occur in the ECC and UKQ groups. Over-estimates are found in the case of USQ firms and, interestingly, both French-language groups (FCQ and ForFrQ) as well.

Table XV.1

Adequacy of the explanatory factors used in this study

Actual and estimated\* employment of French-speaking people in salaried positions in sample firms earning \$5000 per annum and above

Ownership- location group	Number of French-speaking employees		Difference (Actual - Est.)	Percentage difference
	Actual	Estimated		
FCQ	447	477	-30	-6.7
ECQ	3,228	2,748	480	14.9
ECC	614	589	25	4.1
ForFrQ	149	151	-2	-1.3
UKQ	564	559	5	0.9
USQ	909	940	-31	-3.4
USC	214	269	-55	-25.7
Total	6,125	5,733	392	6.4

\*Estimated on the basis of the explanatory factors listed on pages 253-4.

We mentioned in an earlier chapter that we could never test directly for the effects of discrimination if it exists. We do note now, however, in terms of our model, that discrimination (as well as any other recognizable explanatory factors not forming part of the model, together with random or erratic factors) would help to account for any difference between the estimated and the actual figures. In this regard it is important to note that, for the sample as a whole, the estimate is *lower* than the actual. Thus, those other explanatory factors which are not built into the model are acting, on balance, in such a way as to *increase* the representation of French Canadians in salaried positions, not decrease it. Significant differences between estimated and actual values occur only in the FCQ and ECQ groups, and here it is also interesting to note that the non-specified factors are acting in such a way as to increase the representation of French Canadians in firms where the language of ownership is English, and to increase the representation of English-speaking people in firms where the language of ownership is French. There appears to be no evidence of discrimination.

Turning now to the information provided by correlation analysis, and restricting ourselves to the most significant partial correlation coefficients,<sup>2</sup> we note that the principal factors tending to increase (or at least be associated with higher values of) the proportion of French Canadians in salaried positions are (in diminishing order of importance):

- Location in Quebec outside Montreal
- Ownership-location group FCQ
- Ownership-location group ForFrQ
- Location in Montreal
- Work in the public relations functional area
- Income group \$5,000-6,499 per annum
- Income group \$6,500-7,999 per annum.

Two other similar models were built, using the same explanatory factors but substituting as the dependent variables respectively, the bilingual requirement on French-speaking employees, and the bilingual requirement on English-speaking employees. The following results may be of interest if used in conjunction with the findings of Chapter VI:

1) Factors tending to *increase* the already high bilingual requirement on French-speaking employees are, in order of importance:

- The firm is primarily a consumer goods manufacturer
- Work in the personnel functional area
- Work in the purchasing functional area
- The firm is regional (in the scope of its operations).

2) Factors tending to *decrease* the bilingual requirement on French-speaking employees are, in diminishing order of importance:

- Location in Ontario
- Location in the Atlantic provinces
- Ownership-location group USQ
- Ownership-location group FCQ

Ownership-location group UKQ

Ownership-location group ECC.

3) Factors tending to *increase* the relatively low bilingual requirement on English-speaking employees are, in diminishing order of importance:

Location in Quebec outside of Montreal

Work in the public relations functional area

Location in Montreal

Ownership-location group ForFrQ

Work in the personnel functional area.

4) Factors tending to *decrease* the bilingual requirement on English-speaking employees are, in diminishing order of importance:

Ownership-location group USQ

Work in head office (several of which are located outside the province of Quebec).

One of the features of the analytical method used here is that it treats each explanatory factor individually, without regard to the group of factors (such as "income", "location", and "functional area") to which it belongs. It is mathematically difficult to handle factors such as those we have selected in groups, but it would be interesting to know to what extent income *per se* determines practice compared with, say, location of operations. One method of accomplishing this is to build a number of regression models similar to those used earlier but restricting the explanatory factor to only the six income categories, or only the five geographic regions, and so on. From each of these models we can then obtain a measure<sup>3</sup> of its adequacy in "explaining" variations in a given characteristic of corporate practice. This was done for five characteristics of corporate practice and eight groups of explanatory factors making a total of forty models.

The five characteristics selected for testing (all of which relate to salaried employees earning over \$5,000 per annum) are:

- 1) The percentage of French-speaking employees in total salaried staff;
- 2) The bilingual requirement on French-speaking salaried employees;
- 3) The bilingual requirement on English-speaking salaried employees;
- 4) The company's French-language capability (French-speaking plus bilingual English-speaking employees as a percentage of total salaried staff);
- 5) The company's English-language capability (English-speaking plus bilingual French-speaking employees as a percentage of total salaried staff).

The eight groups of explanatory factors (now considered without regard to specific identification of any factor within the group) are: income, ownership-location, scope of operations, location of operations, whether or not the relevant work area is located in the company head office, functional area, type of product, and the regional distribution of sales.



The results of this analysis indicate that the percentage of French-speaking employees in salaried staff is most strongly influenced by the location of operations and then, in order of diminishing importance, by ownership-location, the regional distribution of sales, and the scope of operations. It is influenced very little by income, functional area, or whether or not the employee works in head office.

It is helpful to bear in mind that had our characteristic been the percentage of English-speaking employees in salaried staff, the same results would have been obtained, since by our definition every employee who does not have French as his mother tongue is considered to be English-speaking. The same relationship does not hold between the bilingual requirement on French-speaking employees and the bilingual requirement on English-speaking employees, since these are determined by the firm independently of one another.

The bilingual requirement on French-speaking employees is influenced most by the location of operations, and then about equally by the type of product and the regional distribution of sales, followed by income and functional area. Location of operations is the most powerful determinant of the bilingual requirement on English-speaking employees also, and it is much stronger in this case than it is with respect to the bilingualism of French-speaking employees. Following in order of diminishing importance, and much less pronounced than location of operations, are the regional distribution of sales, ownership-location, scope of operations, and functional area. The distribution of sales by product type and income both have a very weak effect.

The next two characteristics of corporate practice are new in the sense that they have not been used earlier in this report, but they do not open up a new field of study. They arise mainly from our need to express our areas of interest in a form which is mathematically meaningful to our model. What we have defined as a company's French-language capability is a measure of its adaptability to French-language factors in its environment, and it represents the number of French-speaking employees plus the number of bilingual English-speaking employees<sup>4</sup> expressed as a percentage of total salaried staff earning over \$5000 per annum. A company's English-language capability is similarly defined, involving all English-speaking plus bilingual French-speaking employees.

Our analysis indicates that the English-language capability of sample firms is not significantly influenced by any group of explanatory factors. This is because, as described earlier, the use of English is so pervasive that little variation was encountered that had to be "explained" by our factors. The French-language capability of sample companies, on the other hand, does vary and it is quite strongly influenced by several explanatory factors. Chief among these is location of operations, followed by ownership-location and the regional distribution of sales, and then scope of operations.



In all of the foregoing tests, the question of whether or not the relevant work area was located in the company head office had little or no influence on any characteristic of corporate practice.

### *B. Conclusions*

Throughout this study we have concentrated on two principal characteristics which we sought to measure, find differences in, and account for in terms of the explanatory factors. These two characteristics, which are basic to the problem of bilingualism and biculturalism in our context are (1) the relative employment of English- and French-speaking people, and (2) the relative use of the English and French languages in business. The numerous explanatory factors relate to the nature of the business being carried out by the firm, the type of product it produces and sells, where its markets and sources of inputs lie, and location of its manufacturing operations, and so on.

In seeking to organize all these factors for logical study, we were brought up against the fact that they are usually interdependent, and that interrelationships between them form a very complex network. This prompted us to elect the systems approach for our study, since this approach pays specific attention to the nature of complex interrelationships between elements, rather than ignoring them in favour of an analysis of the elements alone. Once we elected to take this approach, the principal criterion for evaluating a firm's behaviour became available. That criterion is *adaptability*.

In summary, we found that the large manufacturing firms in our sample have adapted very well to the conditions facing them. Complete adaptation to conditions such as language and ethnicity in the economic and social environment has not been possible, in certain cases, because of constraints imposed by the shortage of people (particularly French-speaking people) possessing the necessary training, education, or experience who are willing to work in industry rather than in other sectors of the economy such as the professions or the civil service. However, we also found evidence that English-language business firms are seeking to relieve these constraints, especially as they apply to French-speaking people, by actively seeking out for employment recent engineering and commerce graduates of French-language universities, paying salary premiums to bilingual French Canadians, and sponsoring French-language courses for English-speaking executives. Not all of these efforts (and especially not the last) have been successful, but there are very few avenues which remain unexplored. Among these few is the possibility of encouraging French-speaking employees to use French more often in their written reports, and we have argued that this may be worth attempting. In most cases, such a move would not involve a great change in practice, nor serious disruption of the course of business, yet it is likely to have very beneficial effects on French Canadian employees, giving them a

greater sense of belonging in industry. It would also enable them to do better, more effective work.

We have discovered, also, that there are many factors encouraging the use of English as the language of business which have a powerful effect on the practices of Canadian industrial firms, and which are not susceptible of change by any firm, or by all firms acting together, or by government, should it decide to intervene. These factors relate to the increasing internationalization of business, and to the continuing rapid development of industrial technology. Canada's size and position in the world economy dictate that Canadian manufacturing firms, if they are to remain competitive, must keep up to date with technological improvements, and the common language for exchanging technological information is English. Canadian manufacturing firms must also enter into, and compete in, world markets for manufactured goods, and here again the language of business is preponderantly English. Strong confirmation of the influence of these factors on the language of business used in Canadian firms is given by the data on practices of French-language companies. In these firms, where the language of ownership, top management and nearly all wage-roll employees is French, the bilingual requirements on French-speaking salaried staff are higher than in firms of any other ownership group.

Having examined the influence of all those factors encouraging the use of English in business, and all those encouraging the use of French, we came to the conclusion that the only areas in which French could be used as the sole language of business are those functional areas and those operations that are (1) located in French-speaking regions of the country, (2) can be staffed by French-speaking people and, more importantly, (3) can be insulated from outside contact with English-speaking markets and sources of technology. Very few manufacturing operations meet these requirements, even in Quebec outside Montreal. Conversely, those operations in which English can be used as the sole working language must also be isolated from influences that encourage the use of French. The number of such operations in Quebec (including Montreal) is small and diminishing rapidly.

In response to the French Canadians' increasing assertion of their language rights, coupled with their increasing availability for work in industry and their increasing purchasing power, many firms which once conducted all their affairs in English are now making greater use of French as well. The result is that bilingualism is becoming more prevalent in the workplace, and we believe that the trend, now well established, will accelerate. We would need to make further tests in succeeding years, however, in order to measure the rate of change.

The power and pervasiveness of the factors which encourage the use of both English and French in Canadian industry, together with the high degree of adaptability of business firms, lead us to make one final observation: the similarities in the policies and practices of

Canadian manufacturing firms are much more striking than the differences. Throughout this study, we have grouped sample firms according to language and nationality of ownership, scope of operations, and product type, and we have concentrated on differences between these groups. However, the underlying similarity was always observable. To a lesser extent (because our focus was on firms, not people) we also examined the attitudes and characteristics of senior managers and directors belonging to both language groups, and here again the similarities far outweighed the differences.

The principal conclusion seems to be that, although Canadian industrial activity necessarily induces social and interpersonal relationships at many levels and offers many opportunities for bilingual and bicultural problems to arise, such problems or imbalances have, on the whole, been avoided. Although social change in Canada has been rapid, Canadian manufacturing firms have adapted to it very well, and most of the problems that have been the subject of both public and private argument and criticism seem to have concerned extreme cases, not typical conditions.

Questionnaire: Corporate Policies and  
Practices with respect to Bilingualism  
and Biculturalism

Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

joint study on

CORPORATE POLICIES and PRACTICES

with respect to

BILINGUALISM and BICULTURALISM

Q U E S T I O N N A I R E

CORPORATE POLICIES AND PRACTICES  
WITH RESPECT TO  
BILINGUALISM AND BICULTURALISM

QUESTIONNAIRE

CONTENTS

-----

- 1.0 GENERAL INFORMATION ON COMPANY
- 2.0 PERSONNEL AND EMPLOYEE RELATIONS
  - 2.1 Current Situation
  - 2.2 Hiring
  - 2.3 Training
  - 2.4 Promotion
  - 2.5 Intrafirm Communication
- 3.0 PROCUREMENT
- 4.0 MARKETING
- 5.0 MISCELLANEOUS
  - 5.1 Shareholder Relations
  - 5.2 Use of Government Services
  - 5.3 Public Relations



Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

joint study on

CORPORATE POLICIES and PRACTICES  
with respect to

BILINGUALISM and BICULTURALISM

Q U E S T I O N N A I R E

PART 1

GENERAL INFORMATION  
ON COMPANY

Note:

- All replies will be kept in strictest confidence.
- If more space is required, please insert additional sheets.
- Return completed questionnaire to:

Graduate School of Business  
McGill University  
Montreal, Quebec

## 1.0 GENERAL INFORMATION

1.1 Name of firm:

1.2 If this firm is a subsidiary, state the name of the parent firm or controlling organization, and the degree of ownership:

---

---

---

1.3 To what person or body of persons does the president of this firm report ?

© 2017 Pearson Education, Inc., or its affiliate(s). All rights reserved.

1.4 Members of board of directors:

[illegible]

1.5 Officers of the corporation: (top 10 or 12 executives)

[illegible]







Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

joint study on  
CORPORATE POLICIES and PRACTICES  
with respect to  
BILINGUALISM and BICULTURALISM

Q U E S T I O N N A I R E

PART 2

PERSONNEL AND  
EMPLOYEE RELATIONS

Note:

- All replies will be kept in strictest confidence.
- If more space is required, please insert additional sheets.
- Return completed questionnaire to:

Graduate School of Business  
McGill University  
Montreal, Quebec

## 2.0 PERSONNEL AND EMPLOYEE RELATIONS

## 2.1 Current Employment Situation

### 2.1.1 Distribution of total employment by location

In Table 2.1.1 (below) please show the number of employees at each of your firm's locations, and the approximate percentage of these employees who are English speaking or French speaking.

TABLE 2.1.1

### DISTRIBUTION OF TOTAL EMPLOYMENT BY LOCATION

[illegible]

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.1.2 Distribution of Present Salaried Staff  
by Language and Income Group  
-----

In Table 2.1.2 (below) show the current number of English-speaking (E) and French-speaking (F) salaried employees in each income group for each region in which your firm operates. (Classify by mother tongue or the language of greatest fluency if neither French nor English). Show this number above the line.

Show below the line the percentage of employees in this number for whom bilingualism is an essential job requirement.

TABLE 2.1.2  
DISTRIBUTION OF SALARIED STAFF BY LANGUAGE AND INCOME

FUNCTION	LANGUAGE(S) OF BUSINESS AT THIS LOCATION	TOTAL NUMBER OF STAFF	NUMBER OF FRENCH OR ENGLISH-SPEAKING EMPLOYEES BY INCOME GROUP (Annual Salary Plus Regular Bonuses & Commissions)											
			\$		\$		\$		\$		\$		\$	
			5000-		6500-		8000-		10000-		12000-		15000	
			6499		7999		9999		11999		14999		& over	
			E	F	E	F	E	F	E	F	E	F	E	F
HEAD OFFICE														
Manufacturing & supporting services			%	%	%	%	%	%	%	%	%	%	%	%
Marketing incl. Sales & Adv.			%	%	%	%	%	%	%	%	%	%	%	%
Personnel			%	%	%	%	%	%	%	%	%	%	%	%
Engineering and Research & Devt.			%	%	%	%	%	%	%	%	%	%	%	%
Finance and Accounting			%	%	%	%	%	%	%	%	%	%	%	%
Public Relations			%	%	%	%	%	%	%	%	%	%	%	%
Purchasing			%	%	%	%	%	%	%	%	%	%	%	%
Other Functions			%	%	%	%	%	%	%	%	%	%	%	%

(cont.)

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.1.2 Distribution of Present Salaried Staff  
by Language and Income Group (cont.)

TABLE 2.1.2 (cont.)

DISTRIBUTION OF SALARIED STAFF BY LANGUAGE AND INCOME

FUNCTION	LANGUAGE(S) OF BUSINESS AT THIS LOCATION	TOTAL NUMBER OF STAFF	NUMBER OF FRENCH OR ENGLISH-SPEAKING EMPLOYEES BY INCOME GROUP (Annual Salary Plus Regular Bonuses & Commissions)											
			\$		\$		\$		\$		\$		\$	
			5000- 6499		6500- 7999		8000- 9999		10000- 11999		12000- 14999		15000 & over	
			E	F	E	F	E	F	E	F	E	F	E	F
QUEBEC : MONTREAL METROPOLITAN AREA														
Manufacturing & supporting services			%	%	%	%	%	%	%	%	%	%	%	%
Marketing incl. Sales & Adv.			%	%	%	%	%	%	%	%	%	%	%	%
Personnel			%	%	%	%	%	%	%	%	%	%	%	%
Engineering and Research & Devt.			%	%	%	%	%	%	%	%	%	%	%	%
Finance and Accounting			%	%	%	%	%	%	%	%	%	%	%	%
Public Relations			%	%	%	%	%	%	%	%	%	%	%	%
Purchasing			%	%	%	%	%	%	%	%	%	%	%	%
Other Functions			%	%	%	%	%	%	%	%	%	%	%	%

(cont.)

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)2.1.2 Distribution of Present Salaried Staff  
by Language and Income Group (cont.)

TABLE 2.1.2 (cont.)

DISTRIBUTION OF SALARIED STAFF BY LANGUAGE AND INCOME

FUNCTION	LANGUAGE(S) OF BUSINESS AT THIS LOCATION	TOTAL NUMBER OF STAFF	NUMBER OF FRENCH OR ENGLISH-SPEAKING EMPLOYEES BY INCOME GROUP (Annual Salary Plus Regular Bonuses & Commissions)												
			\$		\$		\$		\$		\$		\$		
			5000- 6499		6500- 7999		8000- 9999		10000- 11999		12000- 14999		15000 & over		
			E	F	E	F	E	F	E	F	E	F	E	F	
<div>QUEBEC : OTHER THAN MONTREAL</div>															
Manufacturing & supporting services			%	%	%	%	%	%	%	%	%	%	%	%	%
Marketing incl. Sales & Adv.			%	%	%	%	%	%	%	%	%	%	%	%	%
Personnel			%	%	%	%	%	%	%	%	%	%	%	%	%
Engineering and Research & Devt.			%	%	%	%	%	%	%	%	%	%	%	%	%
Finance and Accounting			%	%	%	%	%	%	%	%	%	%	%	%	%
Public Relations			%	%	%	%	%	%	%	%	%	%	%	%	%
Purchasing			%	%	%	%	%	%	%	%	%	%	%	%	%
Other Functions			%	%	%	%	%	%	%	%	%	%	%	%	%

(cont.)



2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.1.2 Distribution of Present Salaried Staff  
by Language and Income Group (cont.)

TABLE 2.1.2 (cont.)

DISTRIBUTION OF SALARIED STAFF BY LANGUAGE AND INCOME

FUNCTION	LANGUAGE(S) OF BUSINESS AT THIS LOCATION	TOTAL NUMBER OF STAFF	NUMBER OF FRENCH OR ENGLISH-SPEAKING EMPLOYEES BY INCOME GROUP (Annual Salary Plus Regular Bonuses & Commissions)											
			\$		\$		\$		\$		\$		\$	
			5000-		6500-		8000-		10000-		12000-		15000	
			6499	7999	9999	11999	14999	& over						
			E	F	E	F	E	F	E	F	E	F	E	F
MARITIME PROVINCES														
Manufacturing & supporting services			%	%	%	%	%	%	%	%	%	%	%	%
Marketing incl. Sales & Adv.			%	%	%	%	%	%	%	%	%	%	%	%
Personnel			%	%	%	%	%	%	%	%	%	%	%	%
Engineering and Research & Devt.			%	%	%	%	%	%	%	%	%	%	%	%
Finance and Accounting			%	%	%	%	%	%	%	%	%	%	%	%
Public Relations			%	%	%	%	%	%	%	%	%	%	%	%
Purchasing			%	%	%	%	%	%	%	%	%	%	%	%
Other Functions			%	%	%	%	%	%	%	%	%	%	%	%

(cont.)

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)2.1.2 Distribution of Present Salaried Staff  
by Language and Income Group (cont.)

TABLE 2.1.2 (cont.)

DISTRIBUTION OF SALARIED STAFF BY LANGUAGE AND INCOME

FUNCTION	LANGUAGE(S) OF BUSINESS AT THIS LOCATION	TOTAL NUMBER OF STAFF	NUMBER OF FRENCH OR ENGLISH-SPEAKING EMPLOYEES BY INCOME GROUP (Annual Salary Plus Regular Bonuses & Commissions)												
			\$		\$		\$		\$		\$		\$		
			5000- 6499		6500- 7999		8000- 9999		10000- 11999		12000- 14999		15000 & over		
			E	F	E	F	E	F	E	F	E	F	E	F	
<div>ONTARIO</div>															
Manufacturing & supporting services			%	%	%	%	%	%	%	%	%	%	%	%	%
Marketing incl. Sales & Adv.			%	%	%	%	%	%	%	%	%	%	%	%	%
Personnel			%	%	%	%	%	%	%	%	%	%	%	%	%
Engineering and Research & Devt.			%	%	%	%	%	%	%	%	%	%	%	%	%
Finance and Accounting			%	%	%	%	%	%	%	%	%	%	%	%	%
Public Relations			%	%	%	%	%	%	%	%	%	%	%	%	%
Purchasing			%	%	%	%	%	%	%	%	%	%	%	%	%
Other Functions			%	%	%	%	%	%	%	%	%	%	%	%	%
			(cont.)												

(cont.)

2.1.2 Distribution of Present Salaried Staff  
by Language and Income Group (cont.)

DISTRIBUTION OF SALARIED STAFF BY LANGUAGE AND INCOME

	LANGUAGE (S) OF BUSINESS AT THIS LOCATION	TOTAL NUMBER OF STAFF	NUMBER OF FRENCH OR ENGLISH-SPEAKING EMPLOYEES BY INCOME GROUP (Annual Salary Plus Regular Bonuses & Commissions)					
			\$ 5000- 6499 <u>E</u> <u>F</u>	\$ 6500- 7999 <u>E</u> <u>F</u>	\$ 8000- 9999 <u>E</u> <u>F</u>	\$ 10000- 11999 <u>E</u> <u>F</u>	\$ 12000-14999 <u>E</u> <u>F</u>	\$ 15000 & over <u>E</u> <u>F</u>
WESTERN PROVINCES								
Manufacturing & supporting services _____	_____	_____	% %	% %	% %	% %	% %	% %
Marketing incl. Sales & Adv. _____	_____	_____	% %	% %	% %	% %	% %	% %
Personnel _____	_____	_____	% %	% %	% %	% %	% %	% %
Engineering and Research & Devt. _____	_____	_____	% %	% %	% %	% %	% %	% %
Finance and Accounting _____	_____	_____	% %	% %	% %	% %	% %	% %
Public Relations _____	_____	_____	% %	% %	% %	% %	% %	% %
Purchasing _____	_____	_____	% %	% %	% %	% %	% %	% %
Other Functions _____	_____	_____	% %	% %	% %	% %	% %	% %



## 2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

### 2.2.1 (cont.)

TABLE 2.2.1 (cont.)

ON-CAMPUS INTERVIEWING AND HIRING EXPERIENCE DURING THE ACADEMIC YEAR 1963-1964 (cont.)

	FACULTY OR SCHOOL					
	<u>C o m m e r c e</u>		<u>E n g i n e e r i n g</u>		<u>S c i e n c e</u>	
	<u>Visited No.</u>	<u>No. of Yes No offers hired</u>	<u>Visited No.</u>	<u>No. of Yes No offers hired</u>	<u>Visited No.</u>	<u>No. of Yes No offers hired</u>
P.Q.						
MCGILL						
SHERBROOKE						
SIR GEORGE W.						
ONT.						
ASSUMPTION						
CARLETON						
LAURENTIAN						
McMASTER						
OTTAWA						
QUEEN'S						
U. OF T.						
WATERLOO						
WESTERN						
YORK						
MAN.						
U. OF MAN.						
SASK.						
U. OF SASK.						



## 2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

## 2.2.1 (cont.)

TABLE 2.2.1 (cont.)

ON-CAMPUS INTERVIEWING AND HIRING EXPERIENCE DURING THE ACADEMIC YEAR 1963-1964 (cont.)

[illegible]

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.2.2 Recent Hiring experience for employees in the \$5,000.00 to \$10,000.00 income range.  
-----

On Table 2.2.2 (pp.280-1 ) please show the hiring experience of your firm during the 12-month period ended 30 June 1964 for employees in the \$5,000.00 to \$10,000.00 income range.

Each line in this table relates to a single individual and the job for which he was hired. Note that this questionnaire excludes all hourly paid personnel and all junior staff members. "Income" in this context means income from employment in your firm only, and includes regular salary plus bonuses and commission.

If necessary, please continue on another sheet.

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.2.3 Recent Hiring Experience for employees earning \$10,000 per annum & over.  
-----

On Table 2.2.3 (pp.282-3) please show the hiring experience of your firm during the 24-month period ended 30 June 1964 for employees in the \$10,000 and over income range.

Each line in this table relates to a single individual and the job for which he was hired. "Income" in this context means income from employment in your firm only and includes regular salary plus bonuses and commissions.

If necessary, please continue on another sheet.









PERIOD ENDED 30 JUNE 1964  
ANNUM AND OVER

## EMPLOYMENT DATA

[illegible]

## 2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.2.4 Please describe briefly your current hiring practices with respect to the applicant's language qualifications, whether they have changed during the last ten years, and why.

[illegible]



2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.3.2 What is the direct cost per annum (excluding the value of employee time spent away from the job) of giving courses in language?

\$ \_\_\_\_\_

2.3.3 What is the direct cost per annum (excluding the value of employee time spent away from the job) of giving all other courses ?

\$ \_\_\_\_\_





2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.3.5 What is the direct cost per annum to the firm of assistance given for language courses ?

\$ \_\_\_\_\_

2.3.6 What is the direct cost per annum to the firm of assistance given for all other courses ?

\$ \_\_\_\_\_

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)2.4 Employee Evaluation and Promotion

- 2.4.1 If your firm makes use of a job description system, describe it briefly, stating in what context it is used (e.g. employee evaluation, clarification and control of lines of authority, and responsibility, etc.) and what language(s) is(are) used in the written records.

---

---

---

---

---

---

- 2.4.2 Describe briefly the procedures followed by your firm in evaluating and reviewing employees' performance.

---

---

---

---

---

---

- 2.4.3 Do supervisors in your firm conduct regular performance interviews with the people who report to them?

☐ Yes

☐ No

If the practice varies according to the level of employee, please comment briefly:

---

---

---

---

---

---

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

- 2.4.4 Has your firm any policy regarding the language used in these performance interviews if superior and subordinate have different mother tongues? If so, please describe briefly.

---

---

---

---

---

- 2.4.5 What language is used for the written record of employee evaluation procedures and interviews ?

---

---

- 2.4.6 Whenever a position is created or becomes vacant in your firm:

- .1 how many candidates, as a general rule, are seriously considered for the job ?

---

---

---

- .2 what is your policy regarding a search for candidates outside the firm ? Check one:

- |                                    |                                  |
|------------------------------------|----------------------------------|
| <input type="checkbox"/> Always    | <input type="checkbox"/> Usually |
| <input type="checkbox"/> Sometimes | <input type="checkbox"/> Never   |

- .3 Comments : \_\_\_\_\_

---

---

---

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.4.7 Movement of Employees Between Company Locations

On Table 2.4.7 (pp.292-3) list the experience of your firm with respect to movement of employees between company locations during the 12 months ended 30 June 1964.

As before use one line for each employee.

When an offer of relocation has been turned down by an employee, complete the line of Job Data and Personal Data, but mark "Refused" in the column headed "Notes".

If information on such cases is not known check here ☐

Where an employee has been moved at his own request, mark "Requested" in the column headed "Notes".

Whenever possible, give the exact salary before and after the move. However, if this is not possible use the following classification and show on the table the letter corresponding to the appropriate income group.

Income Group	Annual Income (incl. salary, commissions and bonuses)	
A	\$ 5,000	- \$ 6,499
B	\$ 6,500	- \$ 7,999
C	\$ 8,000	- \$ 9,999
D	\$10,000	- \$11,999
E	\$12,000	- \$14,999
F	\$15,000	.. and up





[illegible]

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)2.5 Intrafirm Communication

Check which language(languages) is(are) used by your firm in the following areas of communication. If only one box is checked in any case, it will be assumed that the situation noted prevails at all your firm's locations. Where the language used varies by location, please show the locations where such a situation prevails. Use the space under "Comments" to explain any special situation.

2.5.1 Employee Newspaper Locations where situation prevails

- ☐ English only \_\_\_\_\_
- ☐ French only \_\_\_\_\_
- ☐ Bilingual \_\_\_\_\_  
Approx. content in  
English \_\_\_\_\_%  
French \_\_\_\_\_%

Comments: \_\_\_\_\_

\_\_\_\_\_

2.5.2 Union Contracts Locations where situation prevails

- ☐ English only \_\_\_\_\_
- ☐ French only \_\_\_\_\_
- ☐ Bilingual (both \_\_\_\_\_  
versions in same \_\_\_\_\_  
booklet) \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.5.3 Employee Meetings Locations where situation prevails

- ☐ English only \_\_\_\_\_
- ☐ French only \_\_\_\_\_
- ☐ Bilingual \_\_\_\_\_

Does practice vary according to the level of employees involved ?  
If so, how ? \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_

2.5.4 Booklets Describing Employee Benefits Locations where available

- ☐ English only \_\_\_\_\_
- ☐ French only \_\_\_\_\_
- ☐ Bilingual (both versions in same booklet) \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.5.5 Certificates of  
Employee Benefits  
(e.g. life insurance,  
health insurance etc.)

Locations where situation prevails

☐ English only

☐ French only

☐ Bilingual (both  
versions on same  
certificate)

Comments: \_\_\_\_\_

2.5.6 Employee Identification  
Cards, Badges etc.

Locations where situation prevails

☐ English only

☐ French only

☐ Bilingual

Comments: \_\_\_\_\_

2.5.7 Employment Application  
Forms

Locations where made available  
to Applicants

☐ English only

☐ French only

☐ Bilingual (both  
versions on same form)

(cont.)

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.5.7 Employment Application Forms (cont.)

Does practice vary according to the level of employees involved ? If so, how ? \_\_\_\_\_

\_\_\_\_\_

Comments: \_\_\_\_\_

2.5.8 Notices to Employees                      Locations where situation prevails

☐ English only                      \_\_\_\_\_

☐ French only                      \_\_\_\_\_

☐ Both Languages                      \_\_\_\_\_

Comments: \_\_\_\_\_

2.5.9 Safety Posters                      Locations where used

☐ English only                      \_\_\_\_\_

☐ French only                      \_\_\_\_\_

☐ Bilingual                      \_\_\_\_\_

Comments: \_\_\_\_\_



2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)2.5.10 Direction and other Signs Locations where used☐ English only \_\_\_\_\_☐ French only \_\_\_\_\_☐ Bilingual \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

2.5.11 Shop Drawings Locations where used☐ English only \_\_\_\_\_☐ French only \_\_\_\_\_☐ Bilingual (both  
languages on same  
document) \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

2.5.12 Inter-Office Memoranda Locations where situation prevails☐ English only \_\_\_\_\_☐ French only \_\_\_\_\_☐ Bilingual \_\_\_\_\_

Approx. Breakdown

English \_\_\_\_\_%

French \_\_\_\_\_%

(cont.)

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.5.12 Inter-Office Memoranda (cont.)

Does practice vary according to the level of employees involved ? If so how ? \_\_\_\_\_

\_\_\_\_\_

Comments : \_\_\_\_\_

\_\_\_\_\_

2.5.13 Manuals of Instruction and Procedures \_\_\_\_\_ Locations where situation prevails

☐ Produced in English version only \_\_\_\_\_

☐ Produced in French version only \_\_\_\_\_

☐ Produced in both English and French versions \_\_\_\_\_

☐ Produced in English primarily with French versions of some available. \_\_\_\_\_

If the last box is checked, state under what conditions a French version would be produced.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2.0 PERSONNEL AND EMPLOYEE RELATIONS (cont.)

2.5.14 Training Manuals

Locations where situation prevails

(Consider only locations where at least 25% of your employees are French speaking).

- ☐ English only \_\_\_\_\_
- ☐ French only \_\_\_\_\_
- ☐ Bilingual \_\_\_\_\_  
Approx. breakdown:  
English \_\_\_\_\_%  
French \_\_\_\_\_%

Does practice vary according to the level of employees involved ? If so, how ? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_

Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

joint study on

CORPORATE POLICIES and PRACTICES  
with respect to  
BILINGUALISM and BICULTURALISM

Q U E S T I O N N A I R E

PART 3

PROCUREMENT

Note:

- All replies will be kept in strictest confidence.
- If more space is required, please insert additional sheets.
- Return completed questionnaire to:

Graduate School of Business  
McGill University  
Montreal, Quebec

3.0 PROCUREMENT

- 3.1 In Table 3.1 (below) indicate with a check (✓) which languages are used by members of your firm's purchasing department in various types of written communication with Canadian suppliers.

TABLE 3.1

LANGUAGE USED IN  
CORRESPONDENCE RELATING TO PURCHASING

LANGUAGE USED	TYPE OF WRITTEN DOCUMENT			
	<u>Order Forms</u>	<u>Conditions of Purchases</u>	<u>Specifications</u>	<u>Correspondence and Misc.</u>
a) English only	_____	_____	_____	_____
b) French only	_____	_____	_____	_____
c) Both languages	_____	_____	_____	_____
If (c) state approx. breakdown between French and English				
English %	_____	_____	_____	_____
French %	_____	_____	_____	_____



### 3.0 PROCUREMENT (cont.)

3.2 In dealing with suppliers, to what extent do members of your firm's purchasing department find ability to speak French important ? Please use a separate line for each of the various locations where your firm has a purchasing unit.

TABLE 3.2

## FRENCH LANGUAGE REQUIREMENT OF PURCHASING PERSONNEL

[illegible]





3.0 PROCUREMENT (cont.)

- 3.5 Does your firm have a stated policy with regard to centralization of purchasing ?

If so, please describe it briefly below:

---

---

---

---

---

---

- 3.6 Does your firm publish any brochure describing for the benefit of suppliers what products it buys, as well as general information on purchasing procedures ?

☐ Yes ☐ No

☐ In English Only

☐ In French Only

☐ In both languages

- 3.7 Please annex any publications or publicity releases your firm may have concerning purchasing policy with particular regard to buy-local, buy-provincial or buy-Canadian policies, or note briefly here what your policy is :

---

---

---

---

---

---

Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

joint study on

CORPORATE POLICIES and PRACTICES  
with respect to  
BILINGUALISM and BICULTURALISM

Q U E S T I O N N A I R E

PART 4.

MARKETING

Note:

- All replies will be kept in strictest confidence.
- If more space is required, please insert additional sheets.
- Return completed questionnaire to:

Graduate School of Business  
McGill University  
Montreal, Quebec

4.0 MARKETING4.1 Characteristics of Market

4.1.1. State the approximate percentage of your firm's annual sales value which is accounted for by each of the product groups shown below.

(Classify sales made through distributors according to product use.)

TABLE 4.1.1

DISTRIBUTION OF SALES BY PRODUCT GROUP

<u>PRODUCT GROUP</u>	<u>PERCENTAGE OF ANNUAL DOLLAR SALES</u>
1. Products sold to <u>industrial accounts</u> (i.e. Mining and Manufacturing)	
Industrial material for further processing	_____ %
Machinery and parts	_____ %
Industrial supplies	_____ %
SUB-TOTAL	_____ %
2. Products sold to the <u>general public</u> without any further processing whether or not sales are made through jobbers, wholesale dealers or any other inter- mediate distributors	_____ %
3. Products sold to <u>governments and</u> <u>institutions</u> such as hospitals, school boards, religious institutions, universities etc.	_____ %
4. Products sold to general and specialised <u>contractors and builders</u>	_____ %

(cont.)



4.0 MARKETING (cont.)

4.1.1. (cont.)

TABLE 4.1.1 (cont.)

DISTRIBUTION OF SALES BY PRODUCT GROUP (cont.)

<u>PRODUCT GROUP</u>	<u>PERCENTAGE OF ANNUAL DOLLAR SALES</u>
5. Products not covered by above classification : Please specify	
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
SUB-TOTAL:	_____ %
T O T A L	100 %

4.0 MARKETING (cont.)

4.1.2 In Table 4.1.2 (below) show the approximate percentage of your firm's annual sales value accounted for by each of the following market areas.

TABLE 4.1.2

DISTRIBUTION OF SALES VALUE BY LOCATION

<u>MARKET AREA</u>	PERCENTAGE OF ANNUAL SALES VALUE	
<u>Canada</u>		
Maritime Provinces	_____	%
Quebec		
- Montreal Metropolitan area	_____	%
- Elsewhere in Province	_____	%
Ontario	_____	%
Four Western Provinces	_____	%
	SUB-TOTAL	_____ %
<u>Other Countries</u>		
United States	_____	%
Elsewhere	_____	%
	SUB-TOTAL	_____ %
	T O T A L	100 %

#### 4.0 MARKETING (cont.)

## 4.2 Distribution

4.2.1 Do your firm's methods of distribution differ between the main regions of Canada (i.e. Maritime Provinces, Quebec, Ontario and Western Provinces) ?  
If so, describe briefly :

[illegible]

4.0 MARKETING (cont.)

4.3 Sales

4.3.1 Show in Table 4.3.1 (below) the number of salesmen and technical representatives your firm employs within each of its major sales regions. Indicate how many of these are qualified to sell in English only, in French only, or in both languages.

TABLE 4.3.1

LANGUAGE ABILITY OF SALES PERSONNEL

TOTAL NUMBER OF SALES PERSONNEL	<u>NUMBER QUALIFIED TO SELL IN</u>		
	<u>English Only</u>	<u>French Only</u>	<u>Both Languages</u>
Technical specialists and salesmen not assigned to any particular region	_____	_____	_____
Salesmen assigned to specific regions (please specify your major sales regions below) :			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
TOTAL	=====	=====	=====

4.0' MARKETING (cont.)

4.4. Advertising

- 4.4.1 What percentage of total sales value does your advertising budget represent ? \_\_\_\_\_%
- 4.4.2 What percentage of your advertising budget is spent on French language advertising ? \_\_\_\_\_%
- 4.4.3 In Table 4.4.3 (below) show the allocation of your firm's advertising budget among the listed media.  
For each medium show the approximate breakdown of expenditures between French and English language advertising.

TABLE 4.4.3

ALLOCATION OF ADVERTISING EXPENDITURE

MEDIUM	SHARE OF TOTAL ADVERTISING BUDGET	BREAKDOWN OF EXPENDITURES BY LANGUAGE FOR EACH ADVERTISING MEDIUM (English + French = 100%)	
		<u>English</u>	<u>French</u>
T.V.	____%	____%	____%
Radio	____%	____%	____%
Newspapers	____%	____%	____%
Consumer Magazines	____%	____%	____%
Business Newspapers & Magazines	____%	____%	____%
Trade Journals	____%	____%	____%
Catalogues & Brochures	____%	____%	____%
Direct Mail	____%	____%	____%
Other (incl. samples etc.)	____%	____%	____%
TOTAL	100%		

4.0 MARKETING (cont.)

4.4.4 Indicate in the table below the function or title of the persons in your firm who have the responsibility of evaluating advertising agency proposals and deciding whether or not such proposals should be accepted as such, modified or rejected altogether.

Indicate the language qualifications of each of these persons.

TABLE 4.4.4

FUNCTION & LANGUAGE QUALIFICATIONS  
OF PERSONNEL RESPONSIBLE FOR EVALUATING  
ADVERTISING AGENCY PROPOSALS

FUNCTION INVOLVED (Position or title)	NUMBER (if more than one)	ABILITY TO SPEAK OR WRITE :		
		English Only	French Only	Both Languages
		(Check one or specify number)		

Comments : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



4.0 MARKETING (cont.)

4.4.5 Check which of the following statements best describes your firm's advertising practice, when both French and English are used.

- ☐ Advertising is usually conceived in English and translated into French.
- ☐ Advertising is usually conceived in French and translated into English.
- ☐ Advertising is usually conceived separately for each language.

Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

joint study on

CORPORATE POLICIES and PRACTICES

with respect to

BILINGUALISM and BICULTURALISM

Q U E S T I O N N A I R E

PART 5

MISCELLANEOUS

Note:

- All replies will be kept in strictest confidence.
- If more space is required, please insert additional sheets.
- Return completed questionnaire to:

Graduate School of Business  
McGill University  
Montreal, Quebec

5.0 MISCELLANEOUS5.1 Shareholder Relations

5.1.1 In what language(s) is your annual shareholders' meeting conducted ?

☐ English only

☐ French only

☐ Equal importance to both languages

☐ Mainly English - Short presentation in French

☐ Mainly French - Short presentation in English

5.1.2 In what language(s) do you publish your annual report ?

☐ English only

☐ French only

☐ Separate English and French versions

☐ Bilingual report

5.1.3 In what language(s) are your share certificates printed ?

☐ English only

☐ French only

☐ Bilingual

5.0 MISCELLANEOUS (cont.)5.2 Use of Government Services

5.2.1 If your firm makes regular use of the services of any departments or divisions of the Federal Government please supply details in Table 5.2.1 below.

TABLE 5.2.1

USE OF SERVICES PROVIDED BY THE FEDERAL GOVERNMENT

FEDERAL GOVERNMENT DEPARTMENT OR DIVISION	INDIVIDUAL RESPONSIBLE FOR THIS RELATIONSHIP <u>IN YOUR FIRM</u>		LANGUAGE(S) USED IN WRITTEN COMMUNICATION (Check one or both)	
	<u>Function or Title</u>	<u>Mother Tongue</u>	<u>English</u>	<u>French</u>
<u>Departments</u>				
Justice	_____	_____	_____	_____
National Defence	_____	_____	_____	_____
Finance	_____	_____	_____	_____
Trade & Commerce				
- Trade Commissioner	_____	_____	_____	_____
Service	_____	_____	_____	_____
- Others (Specify)	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Transport	_____	_____	_____	_____
Mines & Technical Surveys	_____	_____	_____	_____
National Revenue				
= Taxation	_____	_____	_____	_____
= Customs & Excise	_____	_____	_____	_____
Labour	_____	_____	_____	_____
Public Works	_____	_____	_____	_____
National Welfare & Health	_____	_____	_____	_____

(cont.)

5.0 MISCELLANEOUS (cont.)

5.2.1 (cont.)

TABLE 5.2.1 (cont.)

USE OF SERVICES PROVIDED BY THE FEDERAL GOVERNMENT

FEDERAL GOVERNMENT DEPARTMENT OR DIVISION	INDIVIDUAL RESPONSIBLE FOR THIS RELATIONSHIP IN YOUR FIRM		LANGUAGE(S) USED IN WRITTEN COMMUNICATION (Check one or both)	
	Function or Title	Mother Tongue	English	French
<u>Departments (cont.)</u>				
Defence Production				
Agriculture				
Industry				
Others (specify)				
<u>Other Government Services</u>				
Board of Transport Commissioners				
Dominion Bureau of Statistics				
Industrial Development Bank				
National Research Council				
Tariff Board				
Tax Appeal Board				
Others (Specify)				

5.0 MISCELLANEOUS (cont.)5.2 Use of Government Services (cont.)

5.2.2 If your firm makes regular use of the services of any department of the Quebec Government please supply details in Table 5.2.2. (below).

TABLE 5.2.2.

USE OF SERVICES PROVIDED BY THE GOVERNMENT OF QUEBEC

GOVERNMENT OF QUEBEC DEPARTMENT OR DIVISION	INDIVIDUAL RESPONSIBLE FOR THIS RELATIONSHIP IN YOUR FIRM		LANGUAGE(S) USED IN WRITTEN COMMUNICATION (Check one or both)	
	Function or Title	Mother Tongue	English	French
Finance	_____	_____	_____	_____
Labour	_____	_____	_____	_____
Education	_____	_____	_____	_____
Agriculture	_____	_____	_____	_____
National Resources	_____	_____	_____	_____
Provincial Revenue	_____	_____	_____	_____
Transportation & Communication	_____	_____	_____	_____
Roads	_____	_____	_____	_____
Health	_____	_____	_____	_____
Commerce & Industry	_____	_____	_____	_____
Municipal Affairs	_____	_____	_____	_____
Others (Specify)	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____



5.0 MISCELLANEOUS (cont.)

5.3 Charitable Donations

5.3.1 Please describe briefly how your firm's budget for donations to charities, universities etc. is determined. What are the criteria used in deciding how this budget is allocated and who are the persons in your firm (function or title only) responsible for such decisions ?

---

---

---

---

---

---

---

---

---

---

5.0 MISCELLANEOUS (cont.)

5.3 Charitable Donations (cont.)

5.3.2 List the organizations to which your firm has granted permission to canvass employees on premises.

TABLE 5.3.2

CANVASSING OF EMPLOYEES ON PREMISES BY CHARITABLE ORGANIZATIONS

<u>NAME OF ORGANIZATION</u>	<u>LOCATIONS AT WHICH CANVASSING OF EMPLOYEES HAS BEEN APPROVED</u>

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Questionnaire : Politiques et pratiques  
du monde des affaires relativement au  
bilinguisme et au biculturalisme

Graduate School of Business, McGill University

Ecole des Hautes Etudes Commerciales, Université de Montréal

Etude conjointe sur les

POLITIQUES et PRATIQUES du

MONDE DES AFFAIRES

relativement

au BILINGUISME et au BICULTURALISME

Q U E S T I O N N A I R E

Septembre 1964

POLITIQUES ET PRATIQUES DU  
MONDE DES AFFAIRES  
RELATIVEMENT  
AU BILINGUISME ET AU BICULTURALISME

QUESTIONNAIRE

TABLE DES MATIERES

- 1.0 RENSEIGNEMENTS GENERAUX SUR LA COMPAGNIE
- 2.0 ADMINISTRATION DU PERSONNEL
  - 2.1 Situation Actuelle
  - 2.2 Emploi
  - 2.3 Entraînement
  - 2.4 Promotion
  - 2.5 Communications à l'intérieur de la Firma
- 3.0 APPROVISIONNEMENT
- 4.0 MARKETING
- 5.0 DIVERS
  - 5.1 Relations avec les Actionnaires
  - 5.2 Emploi des Services Gouvernementaux
  - 5.3 Relations Extérieures

Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

Etude conjointe sur les

POLITIQUES et PRATIQUES du  
MONDE DES AFFAIRES  
relativement  
au BILINGUISME et au BICULTURALISME

Q U E S T I O N N A I R E

1ère PARTIE

RENSEIGNEMENTS GENERAUX  
SUR LA COMPAGNIE

Note:

- Toutes les réponses seront tenues comme strictement confidentielles.
- Si vous avez besoin de plus d'espace, veuillez s'il vous plaît insérer d'autres feuilles.
- S'il vous plaît retourner le questionnaire complété à:

Ecole des Hautes Etudes Commerciales  
535, avenue Viger  
Montréal 24, Québec

## 1.0 RENSEIGNEMENTS GENERAUX

1.1 Nom de la firme:

1.2 Si cette firme est une filiale, indiquer le nom de l'organisation-mère ainsi que le degré de contrôle:

1.3 A quelle personne ou à quel groupe de personnes le président de cette firme se rapporte-t-il?

1.4 Membres du conseil d'administration:

[illegible]



1.5 Dirigeants de l'entreprise: (nom des personnes détenant les 10 ou 12 principaux postes)

[illegible]



1.7 Si votre firme a plusieurs divisions fabriquant des produits divers et opérant sur différents marchés, il serait peut-être préférable d'utiliser un questionnaire distinct pour chaque division pour les parties 2, 3, 4 et 5 du questionnaire.

Nom de la Division	Groupe de Produits
--------------------	--------------------

[illegible]

Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

Etude conjointe sur les  
POLITIQUES et PRATIQUES du  
MONDE DES AFFAIRES  
relativement  
au BILINGUISME et au BICULTURALISME

Q U E S T I O N N A I R E

2ième PARTIE

ADMINISTRATION DU PERSONNEL

Note:

- Toutes les réponses seront tenues comme strictement confidentielles.
- Si vous avez besoin de plus d'espace, veuillez s'il vous plaît insérer d'autres feuilles.
- S'il vous plaît retourner le questionnaire complété à:

Ecole des Hautes Etudes Commerciales  
555, avenue Viger  
Montréal 24, Québec

## 2.1 Situation Présente de l'Emploi

Veuillez s'il vous plaît indiquer sur le Tableau 2.1.1 (ci-dessous) le nombre d'employés pour chaque emplacement de votre firme et le pourcentage approximatif de ceux qui sont anglophones et de ceux qui sont francophones.

DISTRIBUTION DU PERSONNEL SUIVANT LE LIEU DE TRAVAIL

[illegible]

2.0 ADMINISTRATION DU PERSONNEL (suite)2.1.2 Répartition du Personnel Salarié Actuel  
SUIVANT LA LANGUE ET LE GROUPE DE REVENU

Sur le Tableau 2.1.2 (ci-dessous) veuillez indiquer, pour chaque région où votre firme opère, le nombre d'employés salariés anglophones (A) et le nombre d'employés salariés francophones (F) suivant le groupe de revenu. (Classifier suivant la langue maternelle ou la langue pour laquelle l'employé a le plus d'affinité dans le cas où la langue maternelle n'est ni le français, ni l'anglais.) Indiquer ce nombre au-dessus de la ligne.

Indiquer sous la ligne le pourcentage de ces employés pour lesquels le bilinguisme est une condition essentielle d'emploi.

TABLEAU 2.1.2

REPARTITION DU PERSONNEL SALARIE  
SUIVANT LA LANGUE ET LE GROUPE DE REVENU

FONCTION	LANGUE(S)	NOMBRE	NOMBRE D'EMPLOYES FRANCOPHONES OU ANGLOPHONES SUIVANT LE GROUPE DE REVENU (Salaire Annuel Avec Bonis Réguliers & Commissions)											
	D'AFFAIRES	TOTAL	\$		\$		\$		\$		\$			
	A CET	D'EM-	5000-	6500-	8000-	10000-	12000-	15000-						
ENDROIT	PLOYES	6499	7999	9999	11999	14999	& plus							
<div>S I E G E S O C I A L</div>			A	F	A	F	A	F	A	F	A	F		
Fabrication & Services s'y rapportant			%	%	%	%	%	%	%	%	%	%		
Marketing avec Vente & Publicité			%	%	%	%	%	%	%	%	%	%		
Personnel			%	%	%	%	%	%	%	%	%	%		
Génie, Recherche & Développement			%	%	%	%	%	%	%	%	%	%		
Finances & Comptabilité			%	%	%	%	%	%	%	%	%	%		
ations Extérieures			%	%	%	%	%	%	%	%	%	%		
Achats			%	%	%	%	%	%	%	%	%	%		
Autres Fonctions			%	%	%	%	%	%	%	%	%	%		



2.1.2 Répartition du Personnel Salarié Actuel  
Suivant la Langue et le Groupe de Revenu (suite)

REPARTITION DU PERSONNEL SALARIE  
SUIVANT LA LANGUE ET LE GROUPE DE REVENU

	LANGUE(S) D'AFFAIRES A CET ENDROIT	NOMBRE TOTAL D'EM- PLOYES	NOMBRE D'EMPLOYES FRANCOPHONES OU ANGLOPHONES SUIVANT LE GROUPE DE REVENU (Salaire Annuel Avec Bonis Réguliers & Commissions)					
FONCTION			\$ 5000- 6499 A F	\$ 6500- 7999 A F	\$ 8000- 9999 A F	\$ 10000- 11999 A F	\$ 12000- 14999 A F	\$ 15000- & plus A F
QUEBEC: REGION DU GRAND MONTREAL								
Fabrication & Services s'y rapportant			% %	% %	% %	% %	% %	% %
Marketing avec Vente & Publicité			% %	% %	% %	% %	% %	% %
Personnel			% %	% %	% %	% %	% %	% %
Génie, Recherche & Développement			% %	% %	% %	% %	% %	% %
Finances & Comptabilité			% %	% %	% %	% %	% %	% %
Relations Extérieures			% %	% %	% %	% %	% %	% %
Achats			% %	% %	% %	% %	% %	% %
Autres Fonctions			% %	% %	% %	% %	% %	% %



2.0 ADMINISTRATION DU PERSONNEL (suite)

2.1.2 Répartition du Personnel Salarié Actuel  
Suivant la Langue et le Groupe de Revenu (suite)

TABLEAU 2.1.2 (suite)

REPARTITION DU PERSONNEL SALARIE  
SUIVANT LA LANGUE ET LE GROUPE DE REVENU

FONCTION	LANGUE(S)	NOMBRE	NOMBRE D'EMPLOYES FRANCOPHONES									
	D'AFFAIRES	TOTAL	OU ANGLOPHONES SUIVANT									
	A CET	D'EM-	LE GROUPE DE REVENU									
ENDROIT		PLOYES	(Salaire Annuel Avec									
			Bonis Réguliers & Commissions)									
			\$	\$	\$	\$	\$	\$				
			5000 -	6500 -	8000 -	10000 -	12000 -	15000				
			6499	7999	9999	11999	14999	& plus				
			A F	A F	A F	A F	A F	A F	A F	A F	A F	
PROVINCES MARITIMES												
Fabrication & Services												
s'y rapportant			% %	% %	% %	% %	% %	% %	% %	% %	% %	
Marketing avec												
Vente & Publicité			% %	% %	% %	% %	% %	% %	% %	% %	% %	
Personnel												
			% %	% %	% %	% %	% %	% %	% %	% %	% %	
Génie, Recherche												
& Développement			% %	% %	% %	% %	% %	% %	% %	% %	% %	
Finances &												
Comptabilité			% %	% %	% %	% %	% %	% %	% %	% %	% %	
Relations Extérieures												
			% %	% %	% %	% %	% %	% %	% %	% %	% %	
Achats												
			% %	% %	% %	% %	% %	% %	% %	% %	% %	
Autres Fonctions												
			% %	% %	% %	% %	% %	% %	% %	% %	% %	



2.1.2 Répartition du Personnel Salarié Actuel  
Suivant la Langue et le Groupe de Revenu (suite)

REPARTITION DU PERSONNEL SALARIE  
SUIVANT LA LANGUE ET LE GROUPE DE REVENU

FONCTION	LANGUE(S)	NOMBRE	NOMBRE D'EMPLOYES FRANCOPHONES											
	D'AFFAIRES	TOTAL	OU ANGLOPHONES SUIVANT											
	A CET	D'EM-	LE GROUPE DE REVENU											
	ENDROIT	PLOYES	(Salaire Annuel Avec											
			Bonis Réguliers & Commissions)											
PROVINCES DE L'OUEST			\$	\$	\$	\$	\$	\$						
			5000- 6499	6500- 7999	3000- 9999	10000- 11999	12000- 14999	15000- & plus						
			A	F	A	F	A	F	A	F	A	F		
Fabrication & Services s'y rapportant			%	%	%	%	%	%	%	%	%	%		
Marketing avec Vente & Publicité			%	%	%	%	%	%	%	%	%	%		
Personnel			%	%	%	%	%	%	%	%	%	%		
Génie, Recherche & Développement			%	%	%	%	%	%	%	%	%	%		
Finances & Comptabilité			%	%	%	%	%	%	%	%	%	%		
Relations Extérieures			%	%	%	%	%	%	%	%	%	%		
Achats			%	%	%	%	%	%	%	%	%	%		
Autres Fonctions			%	%	%	%	%	%	%	%	%	%		







## 2.0 ADMINISTRATION DU PERSONNEL (suite)

2.0 ADMINISTRATION DU PERSONNEL (suite)2.2.2 Récente expérience d'embauchage pour les employés  
dont le salaire initial se situe entre \$5,000 et \$10,000  
-----

Veuillez indiquer sur le Tableau 2.2.2 ( pp. 342-3 ) l'expérience d'embauchage de votre firme au cours des derniers 12 mois se terminant le 30 juin 1964 pour les employés engagés à des salaires de \$5,000 à \$10,000.

Sur ce tableau chaque ligne se rapporte à un individu en particulier et à l'emploi pour lequel il a été engagé. Veuillez prendre note que ce questionnaire exclut tout le personnel rémunéré sur une base horaire quel que soit le revenu annuel. "Revenu", dans le cas qui nous intéresse, signifie revenu provenant de l'emploi par votre firme seulement et comprend le salaire régulier de même que les bonis et commissions.

Si nécessaire, veuillez continuer sur une autre feuille.

2.0 ADMINISTRATION DU PERSONNEL (suite)2.2.3 Récente expérience d'embauchage pour les employés  
gagnant \$10,000 et plus annuellement  
-----

Veuillez indiquer sur le Tableau 2.2.3 ( pp. 344-5 ) l'expérience d'embauchage de votre firme au cours des derniers 24 mois se terminant le 30 juin 1964 pour les employés engagés à un salaire supérieur à \$10,000.

Sur ce tableau chaque ligne se rapporte à un individu en particulier et à l'emploi pour lequel il a été engagé. Veuillez prendre note que ce questionnaire exclut tout le personnel rémunéré sur une base horaire quel que soit le revenu annuel. "Revenu", dans le cas qui nous intéresse, signifie revenu provenant de l'emploi par votre firme seulement et comprend le salaire régulier de même que les bonis et commissions.

Si nécessaire, veuillez continuer sur une autre feuille.



## DONNEES SUR L'EMPLOI

[illegible]







## 2.0 ADMINISTRATION DU PERSONNEL (suite)

2.2.4 Veuillez s'il vous plaît décrire brièvement vos pratiques courantes d'emploi en ce qui a trait aux qualifications linguistiques du candidat, en mentionnant, s'il y a lieu, les changements qui se sont produits au cours des 10 dernières années et les raisons de ces changements.

[illegible]

## 2.0 ADMINISTRATION DU PERSONNEL (suite)

### 2.3 Entraînement et Éducation Spécialisée à l'intention du Personnel

2.3.1 Veuillez s'il vous plaît décrire ci-dessous les cours que votre firme a donnés à ses employés seulement au cours des derniers 12 mois se terminant le 30 juin 1964, qu'ils aient été donnés sur les lieux-mêmes de la firme ou ailleurs. Veuillez inclure les cours de langue mais exclure l'entraînement à des tâches spécifiques donné sur place par les contremaîtres -es cours de familiarisation avec la compagnie donnés aux nouveaux employés.

TABLEAU 2.3.1

[illegible]

2.0 ADMINISTRATION DU PERSONNEL (suite)

2.3.2 Quel est le coût annuel total (en excluant la valeur du temps de l'employé) des cours de langue?

\$ \_\_\_\_\_

2.3.3 Quel est le coût annuel total (en excluant la valeur du temps de l'employé) de tous les autres cours donnés?

\$ \_\_\_\_\_

## 2.0 ADMINISTRATION DU PERSONNEL (suite)

2.0 ADMINISTRATION DU PERSONNEL (suite)

2.3.5 Quel est le coût total annuel de l'aide fournie par la firme pour les cours de langue?

\$ \_\_\_\_\_

2.3.6 Quel est le coût total annuel de l'aide fournie par la firme pour tous les autres cours?

\$ \_\_\_\_\_



2.0 ADMINISTRATION DU PERSONNEL (suite)2.4 Evaluation et Promotion du Personnel

- 2.4.1 Si votre firme utilise un système de description des tâches, décrivez-le brièvement en précisant le contexte dans lequel il est employé (i.e. évaluation de l'employé, délimitation et contrôle des lignes de responsabilités) et en mentionnant quelle(s) langue(s) on emploie pour les registres

---

---

---

---

---

---

- 2.4.2 Veuillez décrire brièvement les méthodes employées par votre firme pour évaluer et suivre le rendement des employés.

---

---

---

---

---

---

- 2.4.3 Les surveillants de votre firme conduisent-ils régulièrement des entrevues avec leurs subordonnés afin de discuter de leur rendement?

☐

Oui

☐

Non

Si cette pratique varie suivant le niveau de responsabilité de l'employé, veuillez s'il vous plaît commenter brièvement:

---

---

---

---

---

---

2.0 ADMINISTRATION DU PERSONNEL (suite)

- 2.4.4 Votre firme a-t-elle une ligne de conduite particulière quant à la langue à utiliser lors de ces entrevues si le supérieur et le subordonné n'ont pas la même langue maternelle? Si oui, veuillez décrire brièvement.

---

---

---

---

---

- 2.4.5 Quelle langue utilise-t-on pour les comptes rendus écrits de ces entrevues de même que pour les instructions décrivant la procédure à suivre?

---

---

- 2.4.6 Lorsqu'on crée une position ou lorsqu'une position devient vacante dans votre firme:

- .1 combien de candidats sont généralement considérés sérieusement pour la position?

---

---

- .2 quelle est votre ligne de conduite quant à la recherche de candidats à l'extérieur de la firme?

<input type="checkbox"/> Toujours	<input type="checkbox"/> Habituellement
<input type="checkbox"/> Parfois	<input type="checkbox"/> Jamais

- .3 Commentaires:

---

---

---

2 0 ADMINISTRATION DU PERSONNEL (suite)

4.7 Déplacement des Employés entre les Divers Sites de la Compagnie

Sur le Tableau 2.4.7 ( pp. 354-5 ), veuillez indiquer l'expérience de votre compagnie en ce qui a trait au déplacement des employés entre les divers sites de la compagnie pour la période des 12 mois se terminant le 30 juin 1964.

Comme pour les autres fois, utiliser une ligne par employé.

Lorsqu'un employé a refusé une offre de déplacement, compléter l'information comme si l'offre avait été acceptée en indiquant toutefois dans la colonne des remarques que l'offre a été refusée.

Si l'on ne possède pas de renseignements sur les cas de refus, veuillez l'indiquer ci-après.



Lorsque l'on a transféré un employé à sa demande, veuillez l'indiquer dans la colonne des remarques.

Autant que possible, donner le salaire exact avant et après le déplacement. Cependant, si cela est impossible, utiliser le classement ci-dessous et indiquer sur le tableau la lettre correspondant au groupe de revenu approprié.

<u>Groupe de Revenu</u>	<u>Revenu Annuel</u> <u>(salaire, commissions et bonis)</u>
A	\$ 5,000 - \$ 6,499
B	\$ 6,500 - \$ 7,999
C	\$ 8,000 - \$ 9,999
D	\$10,000 - \$11,999
E	\$12,000 - \$14,999
F	\$15,000 et plus



[illegible]

2.0 ADMINISTRATION DU PERSONNEL (suite)2.5 Communications à l'intérieur de la firme

Veillez indiquer quelle(s) langue(s) votre firme emploie dans les genres de communication mentionnés ci-après. Si pour un cas donné il n'y a qu'une seule case marquée, on supposera que cette situation prévaut pour tous les sites de votre firme. Si la langue utilisée varie suivant le lieu de travail, indiquer les endroits où l'on trouve une telle situation. Utiliser l'espace réservé aux "Commentaires" pour expliquer toute situation particulière.

2.5.1 Journal des EmployésEndroits où une telle situation prévaut

- ☐ Anglais seulement  
☐ Français seulement  
☐ Bilingue  
Contenu approx. en  
Anglais \_\_\_\_\_ %  
Français \_\_\_\_\_ %

Commentaires: \_\_\_\_\_

2.5.2 Textes de ConventionCollectiveEndroits où une telle situation prévaut

- ☐ Anglais seulement  
☐ Français seulement  
☐ Bilingues (les 2  
versions dans le  
même livret)

Commentaires: \_\_\_\_\_



2.0 ADMINISTRATION DU PERSONNEL (suite)

5.3 Réunions des Employés Endroits où une telle situation prévaut

☐ Anglais seulement \_\_\_\_\_

☐ Français seulement \_\_\_\_\_

☐ Bilingues \_\_\_\_\_

Cette pratique varie-t-elle suivant le niveau de responsabilité des employés concernés? Si oui, comment?

\_\_\_\_\_

Commentaires: \_\_\_\_\_

\_\_\_\_\_

2.5 4 Livrets décrivant Endroits où une telle situation prévaut  
les bénéfices marginaux

☐ Anglais seulement \_\_\_\_\_

☐ Français seulement \_\_\_\_\_

☐ Bilingues (les 2  
versions dans le  
même livret) \_\_\_\_\_

Commentaires: \_\_\_\_\_

\_\_\_\_\_

2.0 ADMINISTRATION DU PERSONNEL (suite)

2.5.5 Certificats de bénéfices  
marginaux (i.e. assurance-  
vie, assurance-santé, etc.) \_\_\_\_\_ Endroits où une telle situation préva

☐ Anglais seulement \_\_\_\_\_

☐ Français seulement \_\_\_\_\_

☐ Bilingues (les 2  
versions sur le même  
certificat) \_\_\_\_\_

Commentaires: \_\_\_\_\_

2.5.6 Cartes d'identification  
des employés, etc. \_\_\_\_\_ Endroits où une telle situation préve

☐ Anglais seulement \_\_\_\_\_

☐ Français seulement \_\_\_\_\_

☐ Bilingues \_\_\_\_\_

Commentaires: \_\_\_\_\_

2.5.7 Formules de demandes  
d'emploi \_\_\_\_\_ Endroits où elles sont disponibles

☐ Anglais seulement \_\_\_\_\_

☐ Français seulement \_\_\_\_\_

☐ Bilingues (les 2  
versions sur une  
même formule) \_\_\_\_\_

2.0 ADMINISTRATION DU PERSONNEL, (suite)

2.5.7 Formulaires de demandes d'emploi (suite)

Cette pratique varie-t-elle suivant le niveau de responsabilité des employés concernés? Si oui, comment?

\_\_\_\_\_

\_\_\_\_\_

Commentaires: \_\_\_\_\_

\_\_\_\_\_

2.5.8 Avis aux Employés Endroits où une telle situation prévaut

☐ Anglais seulement \_\_\_\_\_

☐ Français seulement \_\_\_\_\_

☐ Bilingues \_\_\_\_\_

Commentaires: \_\_\_\_\_

\_\_\_\_\_

2.5.9 Affiches de sécurité Endroits où elles sont employées

☐ Anglais seulement \_\_\_\_\_

☐ Français seulement \_\_\_\_\_

☐ Bilingues \_\_\_\_\_

Commentaires: \_\_\_\_\_

\_\_\_\_\_

2.0 ADMINISTRATION DU PERSONNEL (suite)

2.5.10 Signaux de direction  
et autres affiches ----- Endroits où ils sont utilisés -----

☐ Anglais seulement -----

☐ Français seulement -----

☐ Bilingues -----

Commentaires: -----

-----

2.5.11 Plans et devis ----- Endroits où ils sont utilisés -----

☐ Anglais seulement -----

☐ Français seulement -----

☐ Bilingues (les 2  
versions sur le  
même document) -----

Commentaires: -----

-----

2.5.12 Mémoires à l'intérieur  
des divers services ----- Endroits où une telle situation prévaut -----

☐ Anglais seulement -----

☐ Français seulement -----

☐ Bilingues -----

% approx. en

Anglais ----- %

Français ----- %

2.0 ADMINISTRATION DU PERSONNEL (suite)

## 2.5.12 Mémoires à l'intérieur des divers services (suite)

Cette pratique varie-t-elle suivant le niveau de responsabilité des employés concernés? Si oui, comment?

Commentaires: \_\_\_\_\_

2.5.13 Manuels d'instructions  
et modes d'opération

Endroits où une telle situation prévaut

☐ Anglais seulement

☐ Français seulement

☐ Anglais et français

☐ Principalement anglais  
avec versions françaises  
disponibles dans certains cas

Si la dernière case est marquée, indiquer dans quelles conditions une version française est normalement produite.

2.0 ADMINISTRATION DU PERSONNEL (suite)2.5.14 Manuels d'entraînement      Endroits où une telle situation prévaut

(Considérer seulement les endroits où au moins 25% de vos employés parlent le français)

☐ Anglais seulement \_\_\_\_\_

☐ Français seulement \_\_\_\_\_

☐ Bilingues \_\_\_\_\_  
    % approx. en  
    Anglais \_\_\_\_\_%  
    Français \_\_\_\_\_%

Cette pratique varie-t-elle suivant le niveau de responsabilité des employés concernés? Si oui, comment?

\_\_\_\_\_

\_\_\_\_\_

Commentaires: \_\_\_\_\_

\_\_\_\_\_



Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

Etude conjointe sur les  
POLITIQUES et PRATIQUES du  
MONDE DES AFFAIRES  
relativement  
au BILINGUISME et au BICULTURALISME

Q U E S T I O N N A I R E

3ième PARTIE

APPROVISIONNEMENT

Note:

- Toutes les réponses seront tenues comme strictement confidentielles.
- Si vous avez besoin de plus d'espace, veuillez s'il vous plaît insérer d'autres feuilles.
- S'il vous plaît retourner le questionnaire complété à:

Ecole des Hautes Etudes Commerciales  
535, avenue Viger  
Montréal 24, Québec

3.0 AL PROVISIONNEMENT

- 3.1 Sur le Tableau 3.1 (ci-dessous), indiquer par un crochet (✓) les langues que les membres du service des achats de votre firme utilisent dans leurs communications écrites avec les fournisseurs canadiens.

TABLEAU 3.1

LANGUE UTILISEE POUR LA CORRESPONDANCE  
SE RAPPORTANT AUX ACHATS

<u>LANGUE UTILISEE</u>	<u>GENRE DU DOCUMENT ECRIT</u>			
	<u>Formules de Commande</u>	<u>Conditions d'achats</u>	<u>Devis</u>	<u>Correspondance et Divers</u>
a) Anglais seulement	_____	_____	_____	_____
b) Français seulement	_____	_____	_____	_____
c) Les 2 langues	_____	_____	_____	_____
Si (c), indiquer le % approximatif du français et de l'anglais				
% anglais	_____	_____	_____	_____
% français	_____	_____	_____	_____

3.2 Je qu'à quel point les membres du service des achats de votre firme considèrent-ils le fait de parler français important lorsqu'ils négocient avec les fournisseurs? Veuillez utiliser une ligne distincte pour chacun des endroits où votre firme possède une unité d'achats.

TABLEAU 3.2

# IMPORTANCE DU FRANCAIS POUR LE PERSONNEL PREPOSE AUX ACHATS

[illegible]



3.4 Sur le Tableau 3.4 (ci-dessous), veuillez indiquer, pour chaque emplacement de votre firme, combien de personnes à l'emploi de votre service des achats sont autorisées à placer des commandes; combien de ces personnes parlent le français seulement; combien parlent l'anglais seulement et combien parlent les deux langues.

TABLEAU 3.4

LANGUE(S) PARLEE(S) PAR LE PERSONNEL PREPOSE AUX ACHATS

[illegible]

3.0 APPROVISIONNEMENT (suite)

- 3.5 Votre firme a-t-elle une ligne de conduite particulière quant à la centralisation des achats? Si oui, veuillez la décrire brièvement ci-après.

---

---

---

---

---

- 3.6 Votre firme publie-t-elle des brochures décrivant pour le bénéfice des fournisseurs quels sont les produits qu'elle achète de même que des renseignements généraux sur ses procédures d'achat?

☐ Oui ☐ Non

☐ Anglais seulement

☐ Français seulement

☐ Les deux langues

- 3.7 Veuillez s'il vous plaît joindre toutes les publications ou brochures publicitaires que votre firme pourrait avoir en rapport avec les politiques d'achat local, d'achat provincial ou d'achat national, ou bien noter brièvement quelle est votre politique d'achat.

---

---

---

---

---



Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

Etude conjointe sur les  
POLITIQUES et PRATIQUES du  
MONDE DES AFFAIRES  
relativement  
au BILINGUISME et au BICULTURALISME

Q U E S T I O N N A I R E

4ième PARTIE

MARKETING

Note:

- Toutes les réponses seront tenues comme strictement confidentielles.
- Si vous avez besoin de plus d'espace, veuillez s'il vous plaît insérer d'autres feuilles.
- S'il vous plaît retourner le questionnaire complété à:

Ecole des Hautes Etudes Commerciales  
535, avenue Viger  
Montréal 24, Québec

4.0 MKTETING4.1 Caractéristiques du Marché

- 4.1.1 Veuillez indiquer la répartition approximative des ventes annuelles de votre firme selon chacun des groupes de produits suivants.

(Classer les ventes faites par l'entremise de distributeurs selon l'usage du produit.)

TABLEAU 4.1.1

DISTRIBUTION DES VENTES PAR GROUPE DE PRODUITS

<u>GROUPE DE PRODUITS</u>	<u>POURCENTAGE DES VENTES ANNUELLES</u>
1. Produits vendus aux <u>entreprises industrielles</u> (i.e. Mines et Industrie secondaire)	
Matières premières	_____ %
Machinerie et pièces de machinerie	_____ %
Fournitures industrielles	_____ %
SOUS-TOTAL	_____ %
2. Produits vendus tels quels au <u>grand public</u> que les ventes soient faites ou non par l'entremise d'agents, de marchands en gros ou de tout autre type de distributeurs	_____ %
3. Produits vendus aux <u>gouvernements et institutions</u> tels que commissions scolaires, hôpitaux, institutions religieuses, universités, etc.	_____ %
4. Produits vendus à des <u>entrepreneurs en construction</u> généraux ou spécialisés	_____ %

4.0 MARKETING (suite)

4.1.1 (suite)

TABLEAU 4.1.1 (suite)

DISTRIBUTION DES VENTES PAR GROUPE DE PRODUITS (suite)

<u>GROUPE DE PRODUITS</u>	<u>POURCENTAGE DES VENTES ANNUELLES</u>
5. Produits non compris dans le classement ci-dessus - S'il vous plaît spécifier:	
_____	_____%
_____	_____%
_____	_____%
_____	_____%
_____	_____%
SOUS-TOTAL	_____%
T O T A L	<u><u>100%</u></u>

4.0 M ARKETING (suite)

4.1.2 Veuillez indiquer sur le Tableau 4.1.2 (ci-dessous) le pourcentage approximatif des ventes annuelles de votre firme pour chacune des régions suivantes du marché.

TABLEAU 4.1.2

DISTRIBUTION DU CHIFFRE DE VENTES

<u>REGION DU MARCHE</u>	<u>POURCENTAGE DES VENTES ANNUELLES</u>
<u>Canada</u>	
Provinces Maritimes	_____ %
Québec	
- Montréal Métropolitain	_____ %
- Ailleurs en province	_____ %
Ontario	_____ %
Quatre provinces de l'Ouest	_____ %
SOUS-TOTAL	_____ %
<u>Autres Pays</u>	
Etats-Unis	_____ %
Ailleurs	_____ %
SOUS-TOTAL	_____ %
T O T A L	<u><u>100%</u></u>

4.0 MARKETING (suite)

4.2 Distribution

4.2.1 Les méthodes de distribution de votre firme varient-elles selon les principales régions du Canada (i.e. Provinces Maritimes, Québec, Ontario et Provinces de l'Ouest)? Si oui, décrire brièvement ci-dessous:

---

---

---

---

---

---

---

---

---

---

---

4.0 MARKETING (suite)

4.3 Ventes

4.3.1 Veuillez inscrire sur le Tableau 4.3.1 (ci-dessous) le nombre de vendeurs et de représentants techniques que votre firme emploie pour chacune de ses principales régions de vente. Indiquer combien de ces personnes peuvent vendre en anglais seulement, combien peuvent vendre en français seulement et combien peuvent vendre dans les deux langues.

TABLEAU 4.3.1

LANGUE PARLEE PAR LE PERSONNEL PREPOSE A LA VENTE

	<u>PERSONNEL PREPOSE</u> <u>A LA VENTE</u>	<u>PERSONNEL QUALIFIE POUR VENDRE:</u>		
		<u>en anglais</u> <u>seulement</u>	<u>en français</u> <u>seulement</u>	<u>dans les</u> <u>2 langues</u>
Techniciens et vendeurs assignés à aucune région particulière	_____	_____	_____	_____
Vendeurs assignés à certaines régions (spécifier vos prin- cipales régions de vente ci-dessous)				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
TOTAL	=====	=====	=====	=====



4.0 MARKETING (suite)

4.4 Publicité

4.4.1 Quel pourcentage de votre chiffre total de ventes représente votre budget de publicité? \_\_\_\_\_%

4.4.2 Quel pourcentage de votre budget de publicité représente votre publicité française? \_\_\_\_\_%

4.4.3 Veuillez indiquer sur le Tableau 4.4.3 la répartition du budget de publicité de votre firme suivant les principaux médiums mentionnés ci-dessous. Pour chaque médium, indiquer le pourcentage approximatif des dépenses pour la publicité française et anglaise.

TABLEAU 4.4.3

REPARTITION DES DEPENSES DE PUBLICITE

MEDIUM	PORTION DU BUDGET TOTAL DE PUBLICITE	REPARTITION DES DEPENSES POUR CHAQUE MEDIUM DE PUBLICITE SUIVANT LA LANGUE (Anglais + Français = 100%)	
		Anglais	Français
		_____%	_____%
Télévision	_____%	_____%	_____%
Radio	_____%	_____%	_____%
Journaux	_____%	_____%	_____%
Revue pour le consommateur	_____%	_____%	_____%
Revue et Journaux d'affaires	_____%	_____%	_____%
Revue techniques spécialisées	_____%	_____%	_____%
Catalogues et Brochures	_____%	_____%	_____%
Courrier	_____%	_____%	_____%
Autres (échantillons, etc.)	_____%	_____%	_____%
T O T A L	<u>100%</u>		

#### 4.0 MARKETING (suite)

4. Veuillez indiquer sur le tableau ci-dessous la fonction ou le titre des personnes de votre firme qui ont la responsabilité d'évaluer les propositions des agences de publicité et de décider si ces propositions peuvent être acceptées telles quelles, si elles doivent être modifiées ou si elles doivent être rejetées.

Veillez indiquer les aptitudes linguistiques de chacune de ces personnes.

TABLEAU 4.4.4

FONCTION ET APTITUDES LINGUISTIQUES DU  
PERSONNEL RESPONSABLE DE L'EVALUATION DES  
PROPOSITIONS DES AGENCES DE PUBLICITE

[illegible]

Commentaires: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4.0 MARKETING (suite)

4.4.5 Veuillez indiquer lequel des énoncés suivants décrit le mieux les pratiques de publicité de votre firme lorsque le français et l'anglais sont utilisés.

- ☐ La publicité est généralement conçue en anglais puis elle est traduite en français.
- ☐ La publicité est généralement conçue en français puis elle est traduite en anglais.
- ☐ La publicité est généralement conçue séparément pour chaque langue.

Graduate School of Business, McGill University  
Ecole des Hautes Etudes Commerciales, Université de Montréal

Etude conjointe sur les  
POLITIQUES et PRATIQUES du  
MONDE DES AFFAIRES  
relativement  
au BILINGUISME et au BICULTURALISME

Q U E S T I O N N A I R E

5ième PARTIE

DIVERS

Note:

- Toutes les réponses seront tenues comme strictement confidentielles.
- Si vous avez besoin de plus d'espace, veuillez s'il vous plaît insérer d'autres feuilles.
- S'il vous plaît retourner le questionnaire complété à:

Ecole des Hautes Etudes Commerciales  
535, avenue Viger  
Montréal 24, Québec

5.0 DIVERS5.1 Relations avec les Actionnaires

5.1.1 En quelle(s) langue(s) votre réunion annuelle d'actionnaires est-elle tenue?

- ☐ Anglais seulement
- ☐ Français seulement
- ☐ Importance égale accordée aux deux langues
- ☐ Principalement en anglais - Courte présentation française
- ☐ Principalement en français - Courte présentation anglaise

5.1.2 En quelle(s) langue(s) publiez-vous votre rapport annuel?

- ☐ Anglais seulement
- ☐ Français seulement
- ☐ Versions distinctes françaises et anglaises
- ☐ Rapport bilingue

5.1.3 En quelle(s) langue(s) sont imprimés vos certificats d'actions?

- ☐ Anglais seulement      ☐ Français seulement      ☐ Bilingues

5.0 DIVERS (suite)5.2 Emploi des Services Gouvernementaux

5.2.1 Si votre firme emploie régulièrement les services de certains ministères ou divisions du gouvernement fédéral, veuillez donner des précisions sur le Tableau 5.2.1.

TABLEAU 5.2.1

UTILISATION DES SERVICES DU GOUVERNEMENT FEDERAL

MINISTERE OU DIVISION DU GOUVERNEMENT FEDERAL	PERSONNE RESPONSABLE DE CES RELATIONS DANS VOTRE FIRME		LANGUE(S) UTILISEE(S) POUR LES COMMUNICATIONS ECRITES (En indiquer une ou les 2)	
	Fonction ou Titre	Langue	Anglais	Français
		Maternelle		
<u>Ministères</u>				
Justice	_____	_____	_____	_____
Défense Nationale	_____	_____	_____	_____
Finances	_____	_____	_____	_____
Commerce				
- Services des Attachés Commerciaux	_____	_____	_____	_____
- Autres (Spécifier)				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Transports	_____	_____	_____	_____
Mines & Relevés Techniques	_____	_____	_____	_____
Revenu National				
- Taxes	_____	_____	_____	_____
- Douanes & Accise	_____	_____	_____	_____
Travail	_____	_____	_____	_____
Travaux Publics	_____	_____	_____	_____
Santé Nationale & Bien-Etre Social	_____	_____	_____	_____

(à suivre)



5.0 DIVERS (suite)

5.1 (suite)

TABEAU 5.2.1 (suite)

UTILISATION DES SERVICES DU GOUVERNEMENT FEDERAL (suite)

MINISTERE OU DIVISION DU GOUVERNEMENT FEDERAL	PERSONNE RESPONSABLE DE CES RELATIONS DANS VOTRE FIRME		LANGUE(S) UTILISEE(S) POUR LES COMMUNICATIONS ECRITES (En indiquer une ou les 2)	
	Fonction ou Titre	Langue	Anglais	Français
		Materneile		
<u>Ministères</u> (suite)				
Production de la Défense				
Agriculture				
Industrie				
Autres (Spécifier)				
<u>Autres Divisions Gouvernementales</u>				
Commission des Transports du Canada				
Bureau Fédéral de la Statistique				
Banque d'Expansion Industrielle				
Conseil National des Recherches				
Commission des Tarifs				
Commission d'Appel de l'Impôt				
Autres (Spécifier)				

5.0 DIVERS (suite)

5.2 Emploi des Services Gouvernementaux (suite)

5.2.2 Si votre firme emploie régulièrement les services d'un ministère du gouvernement du Québec, veuillez donner des précisions sur le Tableau 5.2.2.

TABLEAU 5.2.2

UTILISATION DES SERVICES DU GOUVERNEMENT DU QUEBEC

MINISTERE OU DIVISION DU GOUVERNEMENT DU QUEBEC	PERSONNE RESPONSABLE DE CES RELATIONS DANS VOTRE FIRME		LANGUE(S) UTILISEE(S) POUR LES COMMUNICATIONS ECRITES (En indiquer une ou les 2)	
	Fonction ou Titre	Langue	Anglais	Français
		Maternelle		
Finances	_____	_____	_____	_____
Travail	_____	_____	_____	_____
Education	_____	_____	_____	_____
Agriculture	_____	_____	_____	_____
Richesses Naturelles	_____	_____	_____	_____
Revenu Provincial	_____	_____	_____	_____
Transports & Communications	_____	_____	_____	_____
Voirie	_____	_____	_____	_____
Santé	_____	_____	_____	_____
Commerce & Industrie	_____	_____	_____	_____
Affaires Municipales	_____	_____	_____	_____
Autres (Spécifier)	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

5.0 D ERS (suite)5.3 Charités Publiques

- 5.3.1 Veuillez décrire brièvement comment est déterminé le budget de votre firme pour les charités publiques, les dons aux universités, etc. Quels sont les critères employés pour décider de l'allocation de ce budget et quelles sont les personnes de votre firme (fonction ou titre seulement) responsables de telles décisions?

---

---

---

---

---

---

---

---

---

---

5.0 DIVERS (suite)

5.3 Charités Publiques (suite)

5.3.2 Veuillez inscrire ci-dessous le nom des organismes de charité  
auxquels votre firme a donné la permission de solliciter les  
employés au travail.

TABLEAU 5.3.2

ORGANISMES DE CHARITE AUXQUELS ON A ACCORDE LA PERMISSION  
DE FAIRE DE LA SOLLICITATION

<u>NOM DE L'ORGANISME</u>	<u>ENDROITS POUR LESQUELS LA SOLLICITATION A ETE APPROUVEE</u>

Commentaires: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Chapter I

1. In its broadest application, the business systems approach suggests a hierarchy of systems, sub-systems and systems-within-systems in such a way as to permit a more thorough examination and understanding of the way in which the activities of a single operating unit are governed by operations of the firm as a whole, how the operations of the firm are in turn linked to the industry, and the industry to society. Another approach permits us to examine a number of systems operating concurrently in the same organizational unit, such as the cost control system, the quality control system, the production control system, and the data processing system. The last may be designed primarily to enable the first three to function.
2. In some businesses, net profit is increased by additional factors, such as the existence of an element of monopoly in the enterprise's market position, or the availability and use of a productive factor which does not have to be completely paid for. In the latter case, the cost (now a "social cost") is still incurred, but it does not appear on the accounts of the enterprise in question.
3. Other theories view profit as a reward for bearing the risk and uncertainties inherent in carrying on the business, while still others treat profit as a reward for innovation.

## Chapter II

1. *See*, for example, the questionnaire (Appendix). Despite all our efforts, one business executive still told us he felt some of the

questions were of the "when-did-you-stop-beating-your-wife" type. Our belief is that his reaction arose as much from the evaluation which he gave to his answers as from the questions themselves. In any event, our analysis never treats any one answer by itself but only in relation to all other answers.

2. In our study of small firms, the sample was drawn from firms operating in the provinces of Quebec and Ontario, without regard to their involvement with bilingualism and biculturalism. This sample, which includes a far larger number of firms, meets the requirements of randomness more satisfactorily.

### Chapter III

1. ForFrQ firms did not, on average, meet the selection criteria employment "target" of 500 people or more.
2. The company executive giving us the interview told us he knew of a number of other "English-language" companies which were also contemplating such a move. He stressed that emigration would not be sudden, but would involve a phasing out of activities in the Montreal area and a corresponding increase of activity in the Toronto area. The programme, once started, could take from three to five years, according to plans.

### Chapter IV

1. Another FCQ firm reported that nearly all its manufacturing employees are French-speaking except the production manager, who is Scandinavian. Management would have preferred to hire a French Canadian, but this was not possible. The production manager, who speaks English, has taken lessons in French, but without much success, and he still has difficulty communicating. As a result, those people who work in contact with him must be bilingual although their jobs would not require knowledge of English.

### Chapter VI

1. D. E. Armstrong, *Education and Economic Achievement*, Documents of the Royal Commission on Bilingualism and Biculturalism, No. 7 (Ottawa, 1970).



## Chapter VII

1. See especially D. E. Armstrong, *Education and Economic Achievement*.
2. The number of people shown on Figure VII.7 (394 moved) is five less than the number covered in this table (399) because information on their salary (necessary for plotting) is not available. Since all five people are in ECQ firms, which account for 235 cases of movement, the error is not too significant.

## Chapter VIII

1. See D. E. Armstrong, *Education and Economic Achievement*.
2. It will be noted from the questionnaire (Appendix) that information was sought on graduates in engineering, commerce, science, and all other disciplines. Only graduates in engineering and commerce are treated here, since they are by far the two largest groups, and data on them are sufficient to tell the whole story. Information on graduates in science and other disciplines is too sparse to permit good tabulation and analysis.
3. Table VI.2 which relates to the engineering function, shows that the percentage of French Canadians in each income group is slightly higher than the percentage of French Canadians among all graduates in engineering from Canadian universities in past years. (The table neglects graduates from universities outside Canada. Their inclusion would accentuate the comparison, since most of these engineers are not French-speaking.)

## Chapter IX

1. Some firms did report to us that they are devoting effort to improving the quality of French used by French Canadian employees, but detailed figures, such as the number of man-days involved, are not available to us.

## Chapter XI

1. Several people reported to us that French-speaking employees often prefer to use the English-language manual in order to improve their comprehension of English. Sometimes, but not as often, English-speaking employees use the French manual for similar purposes.

## Chapter XII

1. There are, as noted earlier, 15 consumer goods manufacturers, but one does not advertise. The analysis being applied, therefore, is not relevant to that firm and it is omitted from consideration.
2. Namely: television, radio, newspapers, consumer magazines, direct mail and "other," including samples.
3. The correlation coefficient between the two variables is 0.75.
4. Proponents of the effectiveness of advertising might maintain that the cause-effect relationship is the other way around, but we do not go this far.

## Chapter XV

1. Some interesting by-products can be obtained from this study since it is, in several respects, one of the few examinations of Canadian corporate policies and practices generally defined, that is, without regard to any particular problem such as bilingualism and biculturalism. Useful data may be obtained from many of the tables and charts presented in this report by looking only at the total figures and ignoring the breakdown by language group.
2. The distinction between simple and partial correlation coefficients is interesting in the context of our study, for it highlights a problem that we have encountered previously on a number of occasions. Simple correlation concentrates on two variables only, without regard to any others, although their effects may be present in hidden form. Partial correlation measures the degree of association between the two variables in such a way as to nullify the effect of all other variables by treating the relationship on an "other things being equal" basis. We may have noted, for example, that USC firms employ a higher proportion of salesmen than do USQ firms. Simple correlation would indicate that this proportion of salesmen employed by a firm is associated with the location of its head office. However, we know that the operation of our sampling criteria ensured that most firms in our sample which are based elsewhere in Canada are manufacturers of consumer goods, while for firms based in Quebec there is no tendency for either consumer goods or industrial goods manufacturers to predominate. We also know that consumer goods producers have a higher proportion of salesmen among their total employees than do producers of industrial goods. Use of partial correlation analysis helps us to see to what extent the proportion of salesmen is associated with the location of head office and to what extent it is associated with the type of product made by the

firm, considering each factor separately. We know, in this case, that product type is the more important explanatory factor.

With these considerations in mind, we elected to use partial correlation coefficients despite the fact that they are somewhat smaller in magnitude than simple correlation coefficients (the latter, as suggested above, are sometimes larger because there are usually several other factors "working through" them). Our reasons for using partial correlation coefficients are twofold: first because they offer a more balanced evaluation of the influence of each explanatory factor, and second because, in considering all factors simultaneously, they reinforce the systems approach used throughout this study, with its emphasis on the interaction of many factors.

3. The measure used is the coefficient of determination, which is the proportion of total variance that is explained by the regression equation.
4. Since our focus throughout this study is on firms, not people, our measures of the number of bilingual employees relate only to those people whose jobs demand bilingual ability, and do not include those people who may have bilingual ability but do not use it in their work.



Documents  
de la Commission royale d'enquête  
sur le bilinguisme  
et le biculturalisme

# 6 Les ingénieurs canadiens-français et canadiens-anglais à Montréal

Jacques Dofny



*Presented to the*  
LIBRARY of the  
UNIVERSITY OF TORONTO  
*by*

**Mr. Royce Frith**  
**Commissioner**

**Royal Commission on**  
**Bilingualism and**  
**Biculturalism**



Les ingénieurs canadiens-français  
et canadiens-anglais à Montréal

Documents  
de la Commission royale d'enquête  
sur le bilinguisme  
et le biculturalisme

---

- |   |                                 |  |
|---|---------------------------------|--|
| 1 | Peter H. Russell                | <i>The Supreme Court of Canada as a Bilingual and Bicultural Institution</i> |
| 2 | Thérèse Nilski                  | <i>Conference Interpretation in Canada</i>                                   |
| 3 | David Hoffman<br>et Norman Ward | <i>Bilingualism and Biculturalism in the Canadian House of Commons</i>       |
| 4 | Donald V. Smiley                | <i>Constitutional Adaptation and Canadian Federalism Since 1945</i>          |
| 5 | Robert N. Morrison              | <i>Corporate Adaptability to Bilingualism and Biculturalism</i>              |
| 6 | Jacques Dofny                   | <i>Les ingénieurs canadiens-français et canadiens-anglais à Montréal</i>     |
| 7 | Donald E. Armstrong             | <i>Education and Economic Achievement</i>                                    |

À paraître

---

- |  |   |
|--|---|
| C. Beattie, J. Désy<br>et S. Longstaff | <i>Bureaucratic Careers : Anglophones and Francophones in the Canadian Public Service</i> |
| Guy Bourassa                           | <i>Les relations ethniques dans la vie politique de Montréal</i>                          |
| Gérard Lapointe                        | <i>Essais sur la fonction publique québécoise</i>   |
| Monique Mousseau                       | <i>Analyse des nouvelles télévisées</i>   |

Documents  
de la Commission royale d'enquête  
sur le bilinguisme  
et le biculturalisme

---

**6 Les ingénieurs  
canadiens-français  
et canadiens-anglais  
à Montréal**

---

Jacques Dofny

---

*La présente étude a été effectuée pour la Commission royale d'enquête sur le bilinguisme et le biculturalisme. Sa publication sous les auspices de la Commission ne signifie pas nécessairement que celle-ci souscrive aux points de vue qui y sont exprimés.*

**Droits de la Couronne réservés**

En vente chez  
Information Canada à Ottawa,  
et dans les librairies  
d'Information Canada :

*Halifax*  
1735, rue Barrington

*Montréal*  
1182 ouest, rue Sainte-Catherine

*Ottawa*  
171, rue Slater

*Toronto*  
221, rue Yonge

*Winnipeg*  
Édifice Mall Center, 499, avenue Portage

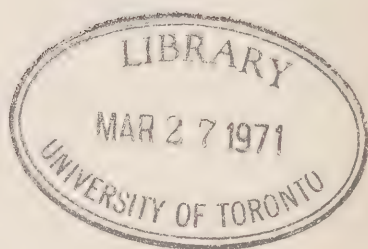
*Vancouver*  
657, rue Granville

ou chez votre libraire

Prix \$ 3.00 (sujet à changement sans avis préalable)

N° de catalogue Z1-1963/1-2/6F

Information Canada  
Ottawa, 1970



Cette recherche a été effectuée avec la collaboration de

Mmes Murielle Audy et Hélène David

et

MM. André Saint-Amand et Gilbert Tarrab

C'est leur précieux concours qui en a permis l'élaboration et la réalisation.

Nous tenons également à remercier les ingénieurs interviewés ainsi que la Corporation et les syndicats de leur efficace coopération.

J. D.





## Liste des tableaux XI

Chapitre premier	Introduction	1
	A Les ingénieurs et la société industrielle	1
	B La société québécoise	2
	C Les ingénieurs et la société québécoise	2
Chapitre II	Méthodologie	5
	A La préparation du projet	5
	B L'échantillonnage	6
	C Les interviews, le codage et les analyses statistiques	9
Chapitre III	Caractéristiques sociales générales	11
	A L'origine géographique	11
	B L'âge	11
	C L'instruction	11
	Études secondaires	11
	Études universitaires	12
	Spécialisation	12
	D Le mariage	13
	L'âge au mariage	13
	Ethnie et mariage	13
	Nombre d'enfants	13
	E La taille de la famille d'origine	13
	F L'emploi de la femme	13
	Conclusions	13
Chapitre IV	Secteurs d'emploi	15
	A La branche d'industrie où l'ingénieur exerce sa profession	16
	B La fonction de l'ingénieur	16
	C Le genre d'entreprise	16
	D Les salaires	17

Chapitre V	Appartenance de classe, mobilité et carrière professionnelle	21
A	La mobilité par rapport au milieu d'origine	21
	La mobilité intergénérationnelle	21
	Dynamique de la situation	27
	La mobilité par rapport aux frères	30
	Le groupe d'appartenance et l'identification sociale	30
B	La carrière professionnelle	31
	L'entrée dans la carrière	31
	L'aspiration à la mobilité	33
	La perception de la carrière	36
	Le rôle des ingénieurs dans l'économie	39
	Conclusion	42
Chapitre VI	La vie économique	45
A	Le test économique	45
	L'actualité	46
	L'information générale	47
	Les grandes entreprises canadiennes	47
	Les grandes entreprises au Québec	48
	La Société générale de financement	48
B	L'urgence et les objectifs économiques	49
C	La croissance et le monde économique environnant	50
	Les sources de capitaux	50
	L'autarcie et le commerce international	51
	La politique tarifaire	52
D	La croissance et les mesures économiques internes	52
	Le régime juridique de l'entreprise	53
	Les institutions privilégiées pour la croissance économique	53
	L'entreprise privée ou la nationalisation	54
E	Les acteurs de la croissance	54
	Le développement économique du Québec et l'amélioration de la position personnelle	55
	La croissance et les groupes professionnels	55
	Les classes sociales et la croissance économique	56
	Conclusion	57

Chapitre VII	Classes sociales	59
A	La structure de la population	59
B	Les classes sociales	60
C	Les groupes ayant des intérêts opposés	61
D	La dynamique sociale	65
	La contribution des classes	65
	Les grèves	66
	Le syndicalisme des ingénieurs	67
	Conclusion	68
Chapitre VIII	Valeurs et industrialisation	71
A	La vie privée et la carrière	72
B	L'entreprise	76
C	Autorité ou démocratie	80
	La vie professionnelle	80
	La vie de famille	82
D	L'économie	83
	L'épargne et les investissements	83
	La fortune	85
E	La politique	86
	L'importance de la vie politique	86
	Le rôle politique et le comportement civique	88
	Le type de régime économique et politique	89
	Mesures économiques	89
	Mesures politiques	90
	Conclusion	91
Chapitre IX	Identification culturelle	95
A	Les fréquentations scolaires et sociales	95
B	La communication et les barrières linguistiques	97
	La langue et la culture	97
	La langue et le travail	97
C	La perception mutuelle des ICA et des ICF	100
	La perception des qualités de l'autre groupe ethnique	100
	La perception des qualités des membres de son propre groupe	101

	La perception des défauts de l'autre groupe ethnique	102
	Défauts perçus dans son propre groupe ethnique	103
D	Les pôles de référence nationaux	103
E	Les relations sociales intimes	105
F	La société d'appartenance	108
	Les sociétés d'appartenance chez les ICF et chez les ICA	109
	Le sentiment nationaliste chez les ICF	110
	Appartenance et caractéristiques sociales	110
	Société d'appartenance et vie économique	112
	Appartenance et identification culturelle	112
	Conclusion	114
Chapitre X	Ethnies, classes et générations	117
A	Les classes et les générations	117
	L'âge et l'origine sociale	117
	Les attitudes face à la carrière	118
	Les attitudes à l'égard de la classe ouvrière	121
	Le statut professionnel du père et du grand-père	124
	La vie de travail et la revendication sociale	124
	L'autoritarisme	125
	L'éthique	126
B	L'ethnie et les générations	128
	La mobilité sociale et professionnelle	129
	L'économie	129
	Les classes sociales	129
	Les valeurs et l'industrialisation	129
	L'identification culturelle	130
	Les écarts interethniques selon les générations	130
	Conclusion	144
Appendice	Questionnaires français et anglais	145

## Tableaux

II-1	Âge des membres de la Corporation des ingénieurs et des ingénieurs compris dans notre échantillon	7
II-2	Spécialisation et fonctions des ingénieurs	7
II-3	Secteur d'emploi	8
II-4	Les ICF dans divers secteurs d'emploi	8
III-1	Scolarité et origine sociale des ICF	12
III-2	Formation scolaire des ICF	12
IV-1	Salaire et âge	17
IV-2	Salaire dans le secteur de la production	18
IV-3	Salaire et spécialisation	18
IV-4	Salaire et type d'entreprise	19
V-1	Profession du père (question 11a)	22
V-2	Taux d'endogamie ethnique	22
V-3	Profession du père de l'ingénieur et du père de l'épouse	23
V-4	Scolarité du père (question 11b)	24
V-5	Taille de la famille des ICF classés par âge (question 3a)	24
V-6	Scolarité et profession du père des ICF classés par âge (questions 11a et 11b)	25
V-7	Taille de la famille, chez les ICA classés par âge (question 3a)	25
V-8	Scolarité et profession du père, chez les ICA classés par âge (questions 11a et 11b)	26
V-9	Profession du grand-père (question 11d)	26
V-10	Taille de la famille du père (question 11c)	26
V-11	Profession du père et du grand-père	28
V-12	Profession des frères (question 3c)	30
V-13	Profession des trois meilleurs amis (question 99a)	30

- V-14 Perception de classe : catégories de professions signalées par l'interviewé comme ayant le même statut que la sienne (question 64a) 31
- V-15 Professions permettant une carrière intéressante (question 46) 32
- V-16 Mode d'obtention du premier emploi (question 15a) 32
- V-17 Type d'entreprise préféré (question 29a) 33
- V-18 Établissement à son compte (questions 14a, 14b et 14c) 34
- V-19 Promotion prévue dans l'entreprise (question 20) 34
- V-20 Attitude à l'égard d'un emploi hors de Montréal (questions 21a, 21b et 21c) 34
- V-21 Attitude de l'épouse à l'égard d'un emploi hors de Montréal (question 21d) 35
- V-22 Milieu favorisant la réussite (question 24a) 35
- V-23 Facteurs contribuant à la réussite (question 30) 36
- V-24 Qualités personnelles contribuant à la réussite (question 31) 36
- V-25 Choix d'un emploi requérant des qualités acquises ou à acquérir (question 40) 36
- V-26 Promotion et heures de travail supplémentaires (question 35a) 37
- V-27 Le salaire et le poste d'un individu comme indices valides de son mérite (question 39) 37
- V-28 Aspects du travail qui plaisent (question 38a) 37
- V-29 Attitude à l'égard de la participation à la gestion de l'entreprise (question 34) 38
- V-30 Attitude rétrospective à l'égard d'une formation technique ou administrative (question 17f) 38
- V-31 Perception du rôle de l'ingénieur dans l'économie (question 33a) 39
- V-32 Répartition de la population et des postes administratifs selon l'ethnie et l'âge (question 9g) 39
- V-33 Salaire des ingénieurs occupant des postes administratifs (question 10) 40



V-34	Répartition des ingénieurs occupant des fonctions administratives selon les secteurs d'emploi et les tranches de salaire	40
V-35	Rôle économique désiré (question 33b)	41
V-36	Attitude à l'égard du degré de spécialisation des ingénieurs (question 25)	41
VI-1	Score total du test économique (question 53)	46
VI-2	Rythme de croissance économique souhaité pour le Québec (question 60)	49
VI-3	Objectifs de la croissance économique (question 62)	50
VI-4	Préférences quant à la source de capitaux (question 58)	51
VI-5	Autarcie ou commerce international (question 61)	51
VI-6	Faut-il élever ou abaisser les barrières tarifaires ? (question 63b)	52
VI-7	Statut de l'entreprise favorable à la croissance économique (question 57)	53
VI-8	Institutions favorisant le plus la croissance économique (question 56)	54
VI-9	Rapports entre la croissance économique du Québec et la position personnelle (question 28)	55
VI-10	Contribution des groupes professionnels à la croissance économique (question 55)	55
VI-11	Contribution des classes sociales à la croissance économique (question 66)	56
VII-1	Pourcentage estimé du secteur agricole dans la main-d'oeuvre totale au Québec (question 67)	59
VII-2	Pourcentage réel du secteur agricole dans la main-d'oeuvre totale au Québec, de 1911 à 1961	60
VII-3	Catégories professionnelles perçues par l'interviewé comme ayant un statut supérieur à la sienne (question 64c)	60
VII-4	Catégories professionnelles perçues par l'interviewé comme ayant un statut égal à la sienne (question 64a)	61

VII-5	Catégories professionnelles perçues par l'interviewé comme ayant un statut inférieur à la sienne (question 64b)	61
VII-6	Perception de groupes ayant des intérêts opposés à ceux de l'interviewé (question 65a)	62
VII-7	Catégories de groupes perçus par l'interviewé comme ayant des intérêts opposés aux siens (question 65b)	62
VII-8	Types d'opposition sociale perçus — choix structuré (question 49)	63
VII-9	Types d'opposition sociale perçus — choix sur l'ensemble (question 50)	64
VII-10	Ouverture ou fermeture de l'éventail des salaires — jugement de réalité (question 83a)	65
VII-11	Ouverture ou fermeture de l'éventail des salaires — jugement de valeur (question 83b)	65
VII-12	Participation des classes sociales à la croissance économique du Québec (question 66)	66
VII-13	Implication dans les grèves (question 68)	66
VII-14	Attitude à l'égard du syndicalisme des ingénieurs (question 52a)	67
VII-15	Motifs de l'attitude à l'égard du syndicalisme (question 52b)	68
VIII-1	Ce qui compte le plus dans la vie (question 71)	73
VIII-2	Ce qui compte le plus dans la vie — répartition par âge	73
VIII-3	But des loisirs (question 86)	73
VIII-4	Durée souhaitée des vacances (question 85)	74
VIII-5	Nombre idéal d'enfants (question 92a)	74
VIII-6	Attitudes à l'égard de la planification des naissances (question 92b)	74
VIII-7	Nombre idéal d'enfants — répartition par âge	75
VIII-8	Attitude à l'égard de l'absence de travail (questions 37a et 37b)	75
VIII-9	Type d'entreprise où travaillent les ingénieurs (question 9a)	76

- VIII-10 Type d'entreprise que l'on conseillerait à un jeune ingénieur (question 29a) 76
- VIII-11 Motif du choix proposé au jeune ingénieur (question 29b) 77
- VIII-12 Type d'entreprise favorisant la réalisation de ses propres possibilités (question 44) 77
- VIII-13 Poste préféré selon la dimension de l'entreprise (question 36) 77
- VIII-14 Conception de la direction d'entreprise (question 36) 78
- VIII-15 Taux d'utilisation des connaissances en génie (question 9c) 78
- VIII-16 Type de formation optimale du directeur d'entreprise (question 22) 79
- VIII-17 Qualités requises d'un bon chef (question 45) 79
- VIII-18 Vie privée et promotion (question 42) 79
- VIII-19 Préférence envers la rigidité ou la souplesse des normes (question 41) 80
- VIII-20 Personnel travaillant sous la direction de l'interviewé (question 9f) 81
- VIII-21 Qualité de l'autorité exercée sur les employés de bureau (question 82a) 81
- VIII-22 Qualité de l'autorité exercée sur les ouvriers (question 82b) 81
- VIII-23 Valeurs importantes à transmettre aux enfants (question 96) 82
- VIII-24 Âge auquel on permet aux filles et aux garçons de sortir seuls le soir (questions 95a et 95b) 82
- VIII-25 Aptitudes des femmes à occuper des fonctions importantes dans l'industrie (question 91) 83
- VIII-26 Mode d'acquisition de biens utiles (question 76) 83
- VIII-27 Utilisation optimale d'une importante somme d'argent (\$ 100 000) (question 73) 84
- VIII-28 Intérêt minimal requis pour un bon investissement (question 74) 84
- VIII-29 Seuil de l'épargne (question 72) 85
- VIII-30 Critère de la richesse financière (question 75a) 85

VIII-31	Groupes sociaux détenteurs de richesse (question 75b)	86
VIII-32	Apport de la fortune personnelle (question 77)	86
VIII-33	Catégories préférées d'articles de journaux ou de revues (question 54)	87
VIII-34	Groupes sociaux utiles à la collectivité (question 51)	87
VIII-35	Importance de la vie privée d'un homme politique (question 70)	88
VIII-36	Attitude normale à l'égard de l'impôt (question 84)	89
VIII-37	Autarcie ou commerce international (question 61)	90
VIII-38	Attitude à l'égard des barrières tarifaires (question 63b)	90
VIII-39	Maintien de l'entreprise privée ou nationalisation (question 63a)	90
VIII-40	Régime autoritaire ou démocratique (question 69)	91
VIII-41	Régime compétitif ou égalitaire (question 80)	91
IX-1	Préférence quant à la langue d'instruction des enfants (question 93b)	95
IX-2	Préférence quant à la composition sociale du milieu scolaire (question 93a)	96
IX-3	Contacts sociaux avec des membres d'autres groupes ethniques (question 99c)	96
IX-4	Ethnie des trois meilleurs amis (question 99b)	96
IX-5	Fréquence d'écoute de la radio et de la télévision dans l'autre langue (question 87)	97
IX-6	Langue utilisée au travail avec les supérieurs, les égaux et les subalternes (questions 18a, 18b et 18c)	98
IX-7	Statut des ingénieurs (question 9b)	98
IX-8	Type d'entreprise où travaillent les ingénieurs (question 9a)	99
IX-9	L'anglais comme langue technique dans l'industrie (question 59)	99

IX-10	Unilinguisme et réussite professionnelle (question 48)	100
IX-11	Qualités de l'autre groupe ethnique (question 19a)	101
IX-12	Qualités des membres de son propre groupe ethnique (question 19c)	101
IX-13	Défauts attribués à l'autre groupe ethnique (question 19b)	102
IX-14	Défauts des membres de son propre groupe ethnique (question 19d)	102
IX-15	Pays d'origine des films préférés (question 89)	103
IX-16	Études supérieures de génie, hors du Québec (question 26a)	104
IX-17	Études supérieures en général, hors du Québec (question 26b)	104
IX-18	Pays où l'on aimerait vivre (question 103)	104
IX-19	Religion et profession d'un éventuel conjoint pour la fille de l'ingénieur (question 101c)	106
IX-20	Ethnie et profession d'un éventuel conjoint pour la fille de l'ingénieur (question 101a)	107
IX-21	Société d'appartenance (question 102, premier choix seulement)	108
IX-22	Typologie des ICF selon la société d'appartenance	109
IX-23	Typologie des ICA selon la société d'appartenance	110
IX-24	Âge et origine sociale des ICF classés par société d'appartenance	111
IX-25	Type d'entreprise et société d'appartenance des ICF	111
IX-26	Société d'appartenance et endogamie ethnique ou professionnelle	113
IX-27	Société d'appartenance et endogamie ethnique ou religieuse	114
X-1	Préférence pour une carrière technique ou administrative, selon l'âge et l'origine sociale	118
X-2	Motif de ce choix, selon l'âge et l'origine sociale	119

- X-3 Promotion prévue, selon l'âge et l'origine sociale 120
- X-4 Attitude à l'égard d'une promotion hors de Montréal, selon l'âge et l'origine sociale 120
- X-5 Perception par les ICF de la contribution des classes sociales à la croissance économique du Québec, selon l'âge et l'origine sociale 121
- X-6 Perception par les ICA de la contribution des classes sociales à la croissance économique du Québec, selon l'âge et l'origine sociale 121
- X-7 Attitude à l'égard des grèves, selon l'âge et l'origine sociale 122
- X-8 Perception de la structure sociale, selon l'âge et l'origine sociale 123
- X-9 Attitude à l'égard de la structure sociale, selon l'âge et l'origine sociale 123
- X-10 Contribution des classes sociales au développement économique du Québec, selon l'origine sociale 125
- X-11 Typologie des variations interethniques et inter-générationnelles 128
- X-12 Mobilité en fonction de la typologie ethnique-âge 131
- X-13 Opinions sur la vie économique en fonction de la typologie ethnique-âge 134
- X-14 Classes sociales en fonction de la typologie ethnique-âge 136
- X-15 Perception des valeurs de la société industrielle en fonction de la typologie ethnique-âge 138
- X-16 Identification culturelle en fonction de la typologie ethnique-âge 141



### *A. Les ingénieurs et la société industrielle*

Le niveau d'industrialisation d'une société, généralement exprimé par un équipement en machines, un réseau routier et ferroviaire, des sources d'énergie domestiquées, peut s'exprimer aussi par la structure de sa population active. Cause et conséquence, cette structure de l'emploi reflète et conditionne une structure sociale. Elle permet à l'industrie de fonctionner, en l'approvisionnant en acteurs sociaux qui remplissent les rôles rendus nécessaires par la division du travail.

Historiquement, l'industrie a d'abord fonctionné à l'aide de deux groupes principaux : le bourgeois entrepreneur et les travailleurs manuels. Le machinisme et le perfectionnement des techniques ont introduit dans l'entreprise le technicien et l'ingénieur. Au XIX<sup>e</sup> siècle, cette catégorie est très mince, mais déjà Saint-Simon lui accorde, dès le début du siècle, un rôle clé dans le devenir de la société industrielle. Taylor, au tournant du siècle, incarne l'ingénieur technicien, l'homme de la production rationalisée, et Fayol, peu après, esquisse la théorie des rôles administratifs.

Mais c'est Veblen qui, le premier, souligne l'importance que prend dans la vie sociale le groupe des ingénieurs. Dans son livre *The Engineers and the Price System* (1921), il prévoit le rôle croissant de l'ingénieur dans la direction de l'entreprise, jetant les fondements d'une théorie de la technocratie que Burnham allait développer quelques années plus tard et qui devait susciter de nombreuses controverses.

Il reste cependant que l'analyse du rôle social des ingénieurs n'a guère été poursuivie, qu'ils soient intégrés dans une classe sociale particulière ou que l'on considère leur comportement dans l'entreprise et que leurs rôles, attitudes et opinions soient analysés en terme de *management* ou d'*organization men*.

Pourquoi donc privilégier ce groupe, parmi les études entreprises sur le comportement des Montréalais dans le cadre des travaux de la Commission royale d'enquête sur le bilinguisme et le biculturalisme ?

### *B. La société québécoise*

La société qui vit au Québec est caractérisée par un système de stratification sociale très complexe. En effet, les professions y sont réparties selon deux modèles : celui d'une société traditionnelle et celui d'une société industrielle avancée. Dans la première prédominent les éléments canadiens-français, et dans la seconde, les éléments canadiens-anglais. Aussi longtemps qu'un partage d'influence a existé, la société formée par les Canadiens français s'est repliée sur des fonctions et des rôles sociaux appropriés à une société traditionnelle. L'industrie était aux mains des Canadiens anglais, leur domination en ce domaine ne se trouvant que faiblement contestée. Aussi, les élites produites par l'un et l'autre des deux groupes étaient-elles radicalement différentes. Les facultés, comme celles de Droit ou de Médecine d'une part, de Philosophie et de Lettres d'autre part, produisaient le gros du contingent des notables et des définisseurs de situation, mais peu d'hommes d'entreprise et encore moins de techniciens, ingénieurs ou savants. L'industrialisation s'accomplissant à l'aide de capitaux canadiens-anglais, les fonctions techniques et administratives revenaient de droit au groupe de langue anglaise.

Cependant, au fil des décennies, la société industrielle n'allait pas moins mobiliser une part croissante de la société québécoise, les Canadiens français formant le gros de la troupe; mais, dans cette mobilisation, les niveaux hiérarchiques et les états-majors restaient hors de portée. Ainsi, la trajectoire de mobilité sociale déclenchée dans les pays occidentaux par l'industrialisation n'apparaissait que très courte pour les Canadiens français au Québec.

Nous nous trouvons donc aujourd'hui, alors que le processus d'industrialisation est très avancé (un des taux les plus élevés du monde, juste après les États-Unis), devant une double échelle de stratification : l'une constituée par les seuls Canadiens français, où prédomine une élite traditionnelle de notables, l'autre constituée par la société industrielle, où prédominent les entrepreneurs et les managers canadiens-anglais. Les attitudes et les comportements des Québécois ne peuvent se comprendre si on ne précise pas ce phénomène et si on ne détermine pas sur quelle échelle de stratification se définissent les acteurs sociaux du Québec.

### *C. Les ingénieurs et la société québécoise*

Si nous rassemblons les deux propositions théoriques précédentes, rôle social croissant des ingénieurs dans la société industrielle et

rôle social décroissant des élites sociales traditionnelles au Québec, et que nous les plaçons dans le cadre d'une société québécoise en pleine expansion industrielle, nous aboutissons à l'hypothèse d'un rôle social croissant des ingénieurs, lesquels pourraient être appelés à jouer un rôle stratégique plus important chez nous que dans la plupart des sociétés industrielles.

Comme nous l'avons dit plus haut, les Canadiens français n'ont pas apporté historiquement une grande contribution aux rôles techniques et administratifs dans l'industrie, mais l'intégration croissante de la population dans l'industrie les a poussés à s'orienter, à partir de la fin de la seconde guerre mondiale, vers des carrières industrielles. Quant aux ingénieurs canadiens-anglais, ils ont assumé traditionnellement les rôles techniques dans la vie économique, sans cependant jouer un rôle important dans la vie sociale et politique du Québec. Aussi leur monopole se trouve-t-il mis en question par l'arrivée accélérée des ingénieurs canadiens-français.

Les deux groupes examinés dans cette étude participent donc à une croissance économique, et ils doivent définir tant leurs positions que le rôle qu'ils entendent y jouer. L'étude aura donc pour objet de déterminer les bases sociales qui sont propres à l'un et l'autre groupe, les trajectoires de mobilité qu'ils ont accomplies, la vision qu'ils se font du monde économique et de la structure sociale qui le porte. Il s'agit ensuite de percevoir la dynamique de ces problèmes : quelles fins et quels moyens assigne-t-on à cette économie, quelles valeurs guident les orientations des deux groupes, comment définissent-ils leur identité propre et celle des autres, et de voir, enfin, si cette problématique du rôle des ingénieurs des deux groupes ethniques dans l'économie est transformée par le temps. En d'autres mots, dans quel sens se dessine l'avenir chez l'élite industrielle d'une société dont les membres, porteurs de deux cultures et de deux histoires, se rencontrent présentement dans un même univers économique\*.

---

\* Sept monographies (thèses de maîtrise en sociologie à l'Université de Montréal) ont été effectuées sous la direction de l'auteur en même temps que la présente étude, à savoir : « La sociabilité des ingénieurs », par Marie-Paule Doucet-Donida, « L'ingénieur entrepreneur », par Robert Mayer, « L'organisation des bureaux d'ingénieurs-conseils », par François Mercier, « Les choix professionnels », par Michèle Paquette-Boulanger, « L'éthique des jeunes ingénieurs », par Peta Rickerd, « Appartenance religieuse et valeurs socio-économiques des ingénieurs », par Nicole Robert, « Le mouvement syndical chez les ingénieurs », par André Saint-Amand.



Les quelques notes qui suivent permettront de mieux situer, du point de vue méthodologique, cette enquête effectuée auprès des ingénieurs de la ville de Montréal.

#### *A. La préparation du projet*

Une première prise de contact avec les organismes intéressés, en particulier la Corporation des ingénieurs du Québec, a été suivie de la préparation d'un plan d'analyse et d'un premier questionnaire. Afin de valider ce questionnaire, une préenquête a été effectuée auprès d'un échantillon composé de 25 ingénieurs canadiens-français et de 25 ingénieurs canadiens-anglais tirés, au hasard, dans l'adresses-graphe de la Corporation. Ce sont les responsables de la rédaction du questionnaire qui ont mené cette préenquête et ont rencontré les ingénieurs de l'échantillon afin de les interviewer, ce qui leur a permis d'évaluer les réactions aux questions et d'orienter les modifications à apporter au questionnaire : reformulation de certaines questions, rejet de certaines autres, etc. Le dépouillement des questionnaires et l'analyse des résultats ont aussi contribué à guider la rédaction du second questionnaire lequel, tout comme le premier, a été traduit du français à l'anglais par un traducteur qualifié et revu par deux personnes de langue anglaise.

Au moins quatre types de questions étaient posées aux ingénieurs : des questions descriptives touchant à la famille, au lieu d'origine, aux études, etc.; des questions d'attitude touchant à la vie économique, professionnelle et familiale; des questions d'information économique; enfin, des questions projectives, grâce auxquelles une vision plus globale de la société pouvait être saisie.

La plupart de ces questions étaient « fermées », c'est-à-dire que l'ingénieur devait choisir une réponse dans une liste qui lui était fournie. L'élaboration de listes exhaustives de choix possibles a été facilitée par la préenquête, une partie importante de ces listes



ayant en effet été élaborée à partir des réponses recueillies lors de cette étape exploratoire. Quelques questions étaient « ouvertes », c'est-à-dire qu'elles laissaient à l'ingénieur pleine latitude dans le choix des réponses. Elles furent codifiées par la suite pour être enregistrées sur cartes perforées.

### *B. L'échantillonnage*

L'échantillon final, tout comme celui qui a servi à la préenquête, provient de l'adressesographe de la Corporation des ingénieurs. Cet univers, le seul qui nous fut aisément accessible, constitue une approximation valable de la population de cette catégorie, mais il comporte cependant des limites : tous les ingénieurs qui travaillent au Québec ne font pas partie de la Corporation, tels ceux qui y occupent de hauts postes au Québec mais sont rattachés à un siège social situé en Ontario.

En outre, cette liste compilée par la Corporation n'est pas entièrement à jour quant au lieu de travail de ses membres et à leur résidence. Il a été difficile, en effet, de retrouver un certain nombre d'entre eux, surtout chez les Canadiens anglais, dont la mobilité géographique est relativement grande, ce qui a contribué à réduire le nombre effectif d'interviews. La décision de n'étudier que les ingénieurs de Montréal a eu un effet identique; il a donc été nécessaire de procéder à un deuxième sondage pour compléter un échantillon de ce fait sensiblement réduit. L'échantillon final comprend un total de 616 répondants, répartis comme suit : 277 ICF et 339 ICA\*. Une description plus détaillée de la procédure d'échantillonnage est donnée à la fin de ce chapitre.

Une comparaison entre l'échantillon final et l'univers d'où il a été tiré indique que cet échantillon est relativement représentatif de la population des ingénieurs du Québec. La comparaison se base sur un document de recherche non publié, établi par la Corporation quelques mois avant l'enquête, dans lequel sont étudiées certaines caractéristiques de ses membres.

L'échantillon de la présente enquête offre des caractéristiques semblables à celles de la population totale quant à l'âge, la spécialisation, le domaine du travail et le secteur d'emploi.

Nous n'avons pu établir que des comparaisons partielles quant à l'origine ethnique, les données qui nous ont servi de paramètre établissant la relation entre les gradués des universités françaises et ceux des universités anglaises, et non entre ICF et ICA. Or, plus de 10 % des ICF ont obtenu leur diplôme dans une université de langue anglaise.

---

\* Les sigles ICF et ICA désignent respectivement les ingénieurs canadiens-français et les ingénieurs canadiens-anglais.



Tableau II-1 Âge des membres de la Corporation des ingénieurs et des ingénieurs compris dans notre échantillon

Âge	Membres de la Corporation*	Ingénieurs de notre échantillon
24-27 ans	19,6	12,8
28-33 ans	21,5	27,8
34-43 ans	31,6	35,6
44 ans et plus	21,8	23,8
Total	94,5	100,0

\* Nous avons calculé l'âge des membres de la Corporation en ajoutant à l'âge moyen des ingénieurs lors de l'obtention de leur diplôme (évalué à 24 ans), le nombre d'années écoulées depuis. Ceci explique le total obtenu ici.

Tableau II-2 Spécialisation et fonctions des ingénieurs

Spécialisation en génie	Corporation	Échantillon	Fonction	Corporation	Échantillon
Chimique	11,5	6,5	Administration générale	29,2	24,5
Civil	28,4	33,7	Construction et installation	11,3	19,9
Électrique	25,2	22,5	Projets	19,7	21,2
Physique	1,5	2,3	Relevés techniques	0,8	1,6
Géologique	0,9	0,2	Production et entretien	13,0	6,3
Mécanique	22,7	24,7	Recherche	6,6	3,0
Métallurgique	2,3	2,3	Achats, vente et publicité	8,9	10,6
Minier	4,5	3,2	Enseignement	2,6	3,0
Autres	3,0	4,6	Contrôle et inspection	3,2	3,2
			Autres	4,7	6,7

On peut cependant noter que la population totale compte 43,0 % d'ICF, 53,8 % d'ICA et 3,2 % de cas non définis, alors que l'échantillon isolé compte 48,9 % d'ICF et 51,1 % d'ICA. Les différences ne sont donc pas considérables. Une autre vérification a pu cependant être faite quant au secteur d'emploi selon l'ethnie.

Il apparaît donc que la représentativité de l'échantillon, dans les secteurs où un nombre suffisant de cas ont été isolés, n'est pas parfaite, puisque les ICF sont surreprésentés dans les secteurs « génie-conseil » et « enseignement ». Ce dernier secteur n'employant que 3,7 % des ICF et 1,7 % des ICA, une absence de représentativité à ce niveau ne peut avoir de conséquences très graves. La non-représentativité des ingénieurs-conseils pourrait être un peu plus importante, puisque ceux-ci forment 19,7 % de la population des ICF et 14,0 % de celle des ICA. Il faut cependant noter que le secteur qui emploie le plus d'ingénieurs, à savoir l'industrie (47,2 % des ICF et 75,8 % des ICA), est représenté de façon satisfaisante.

Tableau II-3 Secteur d'emploi

Secteur d'emploi	Corporation	Échantillon
Génie-conseil	18,9	13,6
Enseignement	2,3	4,9
Gouvernement fédéral	1,7	1,2
Gouvernement provincial	1,7	2,1
Ville de Montréal	4,7	7,8
Autres villes	1,2	0,7
Industrie	63,9	60,8
Divers	5,4	8,8

Tableau II-4 Les ICF dans divers secteurs d'emploi

Secteur d'emploi	Corporation	Échantillon
Génie-conseil	50,2	76,6*
Enseignement	62,8	75,0
Gouvernement fédéral	57,0	**
Gouvernement provincial	92,0	91,7
Ville de Montréal	88,6	90,9
Autres villes	83,2	**
Industrie	32,1	29,6

\* Le reste du secteur (23,4 %) est occupé par les ICA.

\*\* Sans valeur statistique.

C. Les interviews, le codage et les analyses statistiques

La Société de mathématiques appliquées a été chargée de la réalisation des interviews. Ceci s'est fait en trois étapes : formation des enquêteurs; premier contact, par téléphone, avec les ingénieurs de l'échantillon, lui permettant de fixer le rendez-vous; enfin, interview, dont la durée moyenne était de 1 heure 30 à 1 heure 45 minutes.

Une équipe de quatre personnes a procédé au codage — ultérieurement vérifié — des réponses ouvertes, puis les données ont été transférées sur cartes perforées.

Un schéma de tableaux à compiler a alors été établi et la Société de mathématiques appliquées a procédé à la tabulation. Des tests de signification ont été calculés pour chaque tableau, le  $\chi^2$  pour ceux à deux dimensions, le  $\chi^2$  multiple pour ceux à trois dimensions. Tous les tableaux ont été par la suite analysés, de nouvelles tabulations étant demandées à la S. M. A. à chaque étape de cette analyse. Les résultats sont exposés dans les chapitres qui suivent.

Taux d'échantillonnage

Ingénieurs canadiens-français			Ingénieurs canadiens-anglais		
<i>Premier échantillon (1/10)</i>			<i>Premier échantillon</i>		
Total initial			Total initial		
292			501		
- 42			-130		
dont étrangers	8		dont étrangers	71	
trop âgés	2		trop âgés	10	
hors de Montréal	20		hors de Montréal	10	
introuvables	6		Canadiens français	18	
Canadiens anglais	6		études aux É.-U.	21	
		250			371
ICF trouvés parmi les ICA	+ 18		ICA trouvés parmi les ICF	+ 6	
		268			377
<i>Deuxième échantillon (1/8)</i>			<i>Deuxième échantillon</i>		
Total initial			Total initial		
151			244		
- 19			- 48		
dont étrangers	3		dont étrangers	28	
trop âgé	1		trop âgés	7	
hors de Montréal	11		hors de Montréal	6	
Canadiens anglais	3		études aux É.-U.	7	
cas spécial	1				
		132			196

Échantillon

Ingénieurs canadiens-français

Ingénieurs canadiens-anglais

tiré 292 + 151 = 443  
rectifié 268 + 132 = 400

tiré 501 + 244 = 745  
rectifié 377 + 196 = 573

hors échantillon 63  
décédés 6  
déjà interviewés 8

hors échantillon 56  
décédés 8  
déjà interviewés 11  
retirés (+ de 3 ans) 5  
étrangers 18  
pas diplômé 1

77

101

échantillon 323  
interviews 277 (86 %)  
refus 35  
pas retrouvés 11

échantillon 472  
interviews 339 (72 %)  
refus 83  
pas retrouvés 21  
absents 28  
mauvais nom 1

#### A. *L'origine géographique\** (questions 2a et 2b)

Parmi les ingénieurs, 65 % des ICA ne sont pas nés au Québec, contre 4,8 % des ICF; 53,6 % des ICA sont nés dans des villes de plus de 100 000 habitants, contre 61,5 % chez les ICF; 27,3 % des ICA sont nés à Montréal, contre 54 % chez les ICF.

#### B. *L'âge* (question 4)

Si l'on divise notre population d'ingénieurs en deux groupes d'âge, on obtient les chiffres suivants : 72,2 % des ICF ont 39 ans ou moins, alors que 52,7 % des ICA appartiennent à cette catégorie.

#### C. *L'instruction*

##### 1. *Études secondaires* (question 8a)

Chez les ICA, 261 (86,5 %) ont fait leurs études secondaires, dont un seul en français; 161 ICF (58,5 %) ont fait ces études, 20 d'entre eux en anglais.

---

\* L'arrière-plan théorique de cette recherche est celui de Max Weber dans *L'éthique protestante et l'esprit du capitalisme*. Cette recherche théorique s'insérerait dans une étude plus générale des phénomènes sociaux au Québec considérés sous cet angle, et orientait le contenu même du questionnaire.

Pour cette raison, tout autant que pour des considérations techniques — impossibilité d'attendre de tous les Néo-Canadiens des réponses valables et donc comparables à celles des deux autres groupes — les ingénieurs néo-canadiens ne furent pas interviewés.

Il est cependant bien évident qu'à d'autres points de vue, ce troisième groupe a acquis au fil des années une importance grandissante. C'est ainsi que le recensement de 1961 indiquait que les ingénieurs d'origine ni française ni britannique représentaient 24,9 % de tous les ingénieurs vivant au Québec.

Seulement 3,7 % des ICA ont obtenu un baccalauréat ès arts, contre 33,6 % des ICF. Un tiers des ICF ayant leur baccalauréat alors que la proportion est très faible chez les ICA, il n'est pas sans intérêt de cerner le phénomène de la scolarité préuniversitaire chez les ICF. Il existe une corrélation très étroite entre une scolarité plus poussée et l'appartenance aux classes supérieures, sauf pour ce qui est des fils de fermiers (tableau n° III-1).

Un nombre croissant de jeunes ingénieurs n'ont pas de baccalauréat; ce fait traduit l'ouverture progressive de la profession d'ingénieur aux jeunes provenant des classes inférieures (tableau n° III-2).

Tableau III-1 Scolarité et origine sociale des ICF

	Profes- sionnel	Semi-pro- fessionnel	Col blanc	Ouvrier spécialisé	Semi et non spécialisé	Fermiers
Baccalauréat						
ès arts	54,5	33,3	35,0	19,0	23,3	40,0
Autre	45,5	66,7	65,0	81,0	76,7	60,0
<i>Échantillon</i>	<i>55</i>	<i>63</i>	<i>43</i>	<i>58</i>	<i>30</i>	<i>25</i>

Tableau III-2 Formation scolaire des ICF

	Moins de 30 ans	30-39 ans	40 ans et plus
Onzième	68,8	57,0	50,6
Baccalauréat	22,1	38,2	37,7
Autre	9,1	4,8	11,7

## 2. Études universitaires (question 8b)

Parmi les ICA, 46,7 % ont fait leurs études universitaires à McGill, et 1,4 % dans des universités de langue française. Chez les ICF, 84,8 % ont étudié dans des universités françaises et 10,8 % à l'université McGill. Enfin, 51,9 % des ICA ont fait leurs études hors du Québec, contre 4,3 % des ICF.

## 3. Spécialisation (question 8c)

Le groupe des ICF se caractérise par une forte concentration dans le génie civil : 47,7 % contre 20,3 % chez les ICA. C'est dans les génies électrique et mécanique que l'on trouve le plus grand nombre de ces derniers : 30,7 % contre 19,5 % chez les ICF.



*D. Le mariage**1. L'âge au mariage (question 6a)*

Chez les ICA, 36,6 % se sont mariés avant 25 ans, contre 24,6 % chez les ICF. Ceci peut être attribué à une durée plus longue des études préuniversitaires chez les ICF. En effet, 15,9 % seulement de ceux qui ont leur baccalauréat ès arts se sont mariés avant 25 ans.

*2. Ethnie et mariage (question 6b)*

Parmi les ICF, 93,8 % épousent des femmes de leur groupe ethnique, 2,5 % épousent des Irlandaises et 0,8 % des Canadiennes anglaises ou des Écossaises. Chez les ICA, 80,5 % épousent des femmes d'origine britannique, 4,1 % des Canadiennes françaises et 14,6 % des femmes d'une autre origine.

*3. Nombre d'enfants (question 6c)*

Chez les ICA, 60 % ont au plus deux enfants, 35,9 % en ont trois ou quatre et 4,1 % cinq et plus. Pour les ICF, ces pourcentages sont respectivement de 66,8, 25,6 et 7,6. Il faut cependant tenir compte de l'âge moyen nettement inférieur de ces ingénieurs.

*E. La taille de la famille d'origine (question 3a)*

Les ingénieurs appartiennent à des familles dont la taille est variable. Chez les ICF, 17 % seulement proviennent de familles d'un ou deux enfants, contre 50 % chez les ICA, le pourcentage de ceux qui sont issus de familles de trois ou quatre enfants étant le même — environ le tiers — dans les deux groupes. Inversement, les familles nombreuses, de cinq enfants ou plus, sont nettement plus fréquentes chez les ICF : 50,5 %, contre 15,2 % chez les ICA. La seule catégorie des familles de huit enfants ou plus représente 19,5 % chez les ICF.

*F. L'emploi de la femme (question 7)*

Il y a 13 % des épouses des ICA qui ont un emploi, contre 6,7 % des épouses des ICF.

*Conclusions*

Le marché de la profession d'ingénieur a été jusqu'à présent fortement alimenté par un apport canadien-anglais extérieur au Québec. La disparité des deux groupes ethniques, en ce qui concerne l'âge, a en soi une signification importante. En effet, si 72 % des ICF appartiennent à la catégorie des moins de 40 ans contre 53 % seulement des ICA, il est évident que le nombre des Canadiens français accédant à la profession d'ingénieur a considérablement augmenté. Si cette tendance se maintient, l'apport extérieur des ICA au Québec tendra à perdre l'importance relative qu'il avait jusque-là.

Cette différence très marquée dans l'âge doit être examinée de très près, car elle permet de caractériser la situation en termes dynamiques ou historiques. Les ingénieurs de 40 ans et plus sont

davantage représentatifs d'une situation ancienne, celle où les Canadiens anglais constituaient un groupe majoritaire dans l'ensemble des ingénieurs, et où les Canadiens français appartenaient à une société canadienne-française peu pénétrée encore par les valeurs de l'industrialisation. Ces hommes de plus de 40 ans ont, au plus tard, commencé leur carrière avec la vague d'industrialisation de la seconde guerre mondiale, mais la majorité d'entre eux avaient été socialisés avant la guerre aux valeurs d'une société restée rurale dans une proportion de 30 à 50 %.

En sens inverse, les transformations qu'ont apportées la guerre et les investissements des États-Unis n'ont pu manquer d'avoir une influence sur les ingénieurs plus jeunes. Sur ce point particulièrement, il ne faut pas oublier les groupes d'autres origines ethniques, qui ne sont pas étudiés dans ce rapport.

La majorité des postes du secteur civil sont occupés par des Canadiens français (77 %), alors que les secteurs de l'électricité et de la mécanique emploient surtout des Canadiens anglais (60 et 64 % respectivement). Cependant, c'est dans l'industrie chimique que la présence des ICA est la plus forte, avec 93 %.

Par ailleurs, on constate que les ICA sont beaucoup plus nombreux que les ICF dans les fonctions administratives, la recherche, l'achat et la vente, les services et la publicité. Ils occupent en effet, dans la région de Montréal, 61 % des postes administratifs, 82 % des postes de recherche et 85 % des postes commerciaux. Les Canadiens français présentent en outre une faible majorité au niveau des projets et relevés techniques et au niveau de la production et de l'entretien.

Une proportion à peu près égale, mais assez faible, d'ICF et d'ICA travaillent seuls, à leur compte : 3,6 % et 3,5 % respectivement. Les ingénieurs non salariés sont cependant proportionnellement deux fois plus nombreux chez les Canadiens français; 12,7 % des ICF appartiennent à la catégorie « bureaux d'associés » pour former un total de 16,3 % de non-salariés contre seulement 4,5 % des ICA. À peine 8,1 % des ingénieurs de ce groupe appartiennent donc à la catégorie des non-salariés.

Pour ce qui est des ingénieurs salariés, le type d'entreprise qui les emploie diffère aussi lorsqu'on passe du groupe français au groupe anglais. Plus du tiers des ingénieurs canadiens-français sont employés par l'État (Hydro-Québec, municipalités, gouvernements provincial et fédéral), contre seulement 7,5 % des canadiens-anglais, lesquels sont recrutés massivement par la grande entreprise privée : 70 % contre à peine plus d'un quart des ICF.

Lorsqu'on sépare la population en deux groupes d'âge : « moins de 40 ans » et « 40 ans et plus », il est possible de déceler certaines tendances dans l'évolution de la profession à l'intérieur de chacun des deux groupes ethniques.

### *A. La branche d'industrie où l'ingénieur exerce sa profession*

Nous avons noté que le génie civil attire particulièrement les Canadiens français, cette tendance étant aussi marquée chez les jeunes ingénieurs que chez les plus âgés. Par contre, la prédominance canadienne-anglaise dans les domaines du génie électrique et mécanique se révèle en pleine évolution. D'une part, la jeune génération de Canadiens français semble devoir faire disparaître l'écart qui la séparerait du groupe canadien-anglais dans le domaine de l'électricité. En effet, chez les ingénieurs de 40 ans et plus, les Canadiens anglais rattachés au secteur de l'électricité sont quatre fois plus nombreux que les Canadiens français, cette disproportion étant presque nulle chez les jeunes. D'autre part, la prédominance anglaise dans le domaine de la mécanique s'accroît avec la jeune génération. En effet, la proportion d'ingénieurs canadiens-français qui s'engagent dans ce domaine demeure la même dans les deux classes d'âge (13 %), alors qu'elle passe de 19,7 % chez les ICA de 40 ans et plus à 26,1 % chez les ICA de moins de 40 ans.

### *B. La fonction de l'ingénieur*

Les ingénieurs canadiens-anglais occupent une plus large part des fonctions administratives que les ingénieurs canadiens-français, et cet écart n'est pas moindre dans le groupe des jeunes ingénieurs; il semble même au contraire s'élargir. Mais ce phénomène ne traduit peut-être que des différences dans l'évolution de la carrière, les Canadiens français accédant à des postes administratifs plus tardivement que les Canadiens de langue anglaise, ce qui expliquerait la diminution de l'écart entre les deux groupes, qui s'opère avec l'âge.

Ce phénomène de la participation à l'administration des ingénieurs appartenant à la classe des plus âgés apporterait sans doute une explication au fait que les plus de 40 ans travaillent moins dans leur spécialité, surtout chez les Canadiens anglais.

Un autre secteur est aussi couvert principalement par des Canadiens anglais : le secteur commercial. Près de 45 % des postes, dans les achats, la vente, les services et la publicité, sont occupés par les jeunes Canadiens anglais qui ne représentent cependant que 27 % de la population des ingénieurs. Il y a donc ici surreprésentation du groupe des jeunes ICA.

Les jeunes ICF couvrent pour leur part le secteur de la production — construction, installation, entretien — où, à eux seuls, ils occupent 52 % des postes alors qu'ils ne représentent que 35 % de la population des ingénieurs.

### *C. Le genre d'entreprise*

C'est probablement au niveau du type d'entreprise que les ingénieurs des deux groupes se distinguent le plus radicalement. En

effet, alors que chez les Canadiens anglais, quel que soit leur âge, 70 % environ travaillent dans la grande entreprise, on en compte à peine 20 % chez les ICF de plus de 40 ans et 32 % chez ceux de moins de 40 ans. Par ailleurs, près de 40 % des ingénieurs canadiens-français, quel que soit leur âge, occupent des emplois dans les différents organismes gouvernementaux, et un grand nombre travaillent dans la petite entreprise mais, ici, ce phénomène s'accroît avec l'âge.

Les ICF qui ont dépassé 40 ans sont beaucoup plus stables dans leurs emplois que les ICA, si l'on définit stabilité par le nombre d'entreprises qui les ont employés. Ainsi, 65 % des Canadiens français de 40 ans et plus ont travaillé dans trois entreprises ou moins, contre 41 % chez les Canadiens anglais.

Le début de la carrière marque une différence significative entre les deux groupes : 71 % des ICF ont débuté à Montréal contre 56 % des ICA; 21 % ailleurs au Québec contre 7 %; 7 % ailleurs au Canada contre 32 %.

#### D. Les salaires (question 10)

Pour ce qui est des salaires pris globalement, les différences sont assez grandes. Cependant, si l'on contrôle l'âge, elles s'estompent en partie : les jeunes ICF continuent à présenter des salaires légèrement inférieurs à ceux des jeunes ICA, mais les salaires des ICF de 40 ans et plus sont légèrement supérieurs à ceux des ICA de la même classe d'âge (tableau n° IV-1).

Cependant, étant donné que les jeunes constituent plus des deux tiers de l'échantillon ICF, le groupe canadien-français paraît défavorisé au niveau de l'échantillon global et des différentes sphères de travail. Ainsi, les ICF semblent avoir des salaires nettement inférieurs dans le secteur de la production, qui inclut installation, construction et entretien. Or, les jeunes ICF sont nettement surreprésentés dans ce secteur (tableau n° IV-2).

Tableau IV-1 Salaire et âge

	ICA			ICF		
	Tous	39 ans et moins	40 ans et plus	Tous	39 ans et moins	40 ans et plus
Moins de \$ 11 000	36,3	65,7	25,0	60,3	75,1	18,5
De \$ 11 000 à 16 999	45,1	27,4	43,9	27,7	19,8	50,0
\$ 17 000 et plus	18,7	7,9	31,0	11,9	5,0	31,4
<i>Échantillon</i>	<i>285</i>	<i>153</i>	<i>132</i>	<i>267</i>	<i>197</i>	<i>70</i>



Tableau IV-2 Salaire dans le secteur de la production

	ICA	ICF
Moins de \$ 11 000	49,0	66,6
De \$ 11 000 à 16 999	29,0	19,8
\$ 17 000 et plus	22,0	13,6
<i>Échantillon</i>	55	96

Tableau IV-3 Salaire et spécialisation

	Génie civil		Génie électrique		Génie mécanique	
	ICA	ICF	ICA	ICF	ICA	ICF
Moins de \$ 11 000	38,4	53,0	57,6	72,0	47,1	64,9
De \$ 11 000 à 16 999	38,4	30,2	26,9	14,0	35,3	27,0
\$ 17 000 et plus	23,2	16,1	15,3	14,0	17,6	8,1
<i>Échantillon</i>	39	130	78	50	68	37

Si nous examinons trois domaines où il y a concentration particulièrement grande d'ingénieurs, à savoir le génie civil, électrique et mécanique, les ICF paraissent encore défavorisés. A ce niveau, cependant, seules les différences observées dans le domaine du génie électrique semblent pouvoir s'expliquer par l'âge, c'est-à-dire, ici, la sous-représentation des ICF de 40 ans et plus.

Les ICA seraient donc mieux payés dans les domaines du génie civil et mécanique, et cela indépendamment de leur âge. Par ailleurs, il y a surreprésentation des jeunes ICA en génie mécanique.

Enfin, si l'on prend en considération le type d'entreprise qui les emploie, les ICF paraissent moins bien payés que les ICA. Nous nous arrêtons ici aux deux types d'entreprises qui occupent un nombre suffisamment grand d'ingénieurs des deux groupes ethniques pour qu'il y ait possibilité de comparaison : les petites entreprises auxquelles sont ajoutés les bureaux d'ingénieurs-conseils, d'une part; les grandes entreprises, d'autre part (tableau n° IV-4).

Si, au niveau des petites entreprises, les différences, d'ailleurs peu considérables, peuvent s'expliquer par l'excédent de jeunes ICF qui y sont employés, un nombre proportionnellement un peu plus élevé d'ICF de 40 ans et plus devrait au contraire donner un certain avantage salarial aux ICF de la grande entreprise, alors que le tableau ci-après permet d'observer l'inverse.



Tableau IV-4 Salaire et type d'entreprise

	Petites entreprises et bureaux d'ingénieurs-conseils		Grandes entreprises	
	ICA	ICF	ICA	ICF
Moins de \$ 11 000	25,4	39,3	50,0	70,8
De \$ 11 000 à 16 999	40,7	33,7	33,3	19,4
\$ 17 000 et plus	33,9	27,0	16,1	9,7
<i>Echantillon</i>	<i>59</i>	<i>89</i>	<i>204</i>	<i>72</i>



Trois problèmes sont abordés dans ce chapitre : l'appartenance à une classe, la mobilité vécue et projetée, et leur concrétisation dans une carrière professionnelle qui s'insère dans des structures économiques et sociales.

Ce sont donc des classes et des milieux géographiques qui sont à la base des expériences de vie sociale de la population étudiée. Ces expériences sont-elles les mêmes pour les deux groupes étudiés ? Qu'en est-il ensuite de la trajectoire de mobilité que les ingénieurs et leurs pères ont accomplie ? Outre cette mobilité passée, se dessine une mobilité future, une carrière, laquelle peut prendre plusieurs orientations au départ, choisir lorsque des bifurcations se présentent, rencontrer et surmonter des obstacles, utiliser un fonds de motivations, s'exprimer, enfin, dans des projets collectifs, c'est-à-dire être conditionnée par des structures sociales différentes à l'intérieur d'un même cadre économique dans lequel on s'insère ou que l'on cherche à modifier.

#### *A. La mobilité par rapport au milieu d'origine*

Il s'agissait donc, en premier lieu, de situer l'ingénieur par rapport à son père et à ses frères, c'est-à-dire, à son milieu familial, et ensuite, de voir comment il se perçoit socialement et comment il choisit ses amis.

##### *1. La mobilité intergénérationnelle*

En étudiant la profession du père de l'ingénieur, on constate, comme l'indique le tableau n° V-1, que la représentation des ICA est plus élevée d'à peu près 18 % dans les deux catégories supérieures. En sens inverse, celle des ICF est plus élevée de 15 % dans les milieux ouvriers. Par contre, le milieu rural ne constitue pas un milieu d'origine plus important dans un groupe que dans l'autre.

La variable « profession du père » a certes une influence sur le comportement, surtout chez les Canadiens français. En effet, quand on évalue l'influence de l'origine sociale de l'ingénieur sur le choix de son épouse, il apparaît que celui-ci choisit de préférence une jeune fille de même origine que lui (question 11f). Le taux d'endogamie est toutefois beaucoup plus fort chez les ICF que chez les ICA : 1,68 contre 0,94. Il faut noter cependant que ce taux particulièrement bas chez les ICA est attribuable à une endogamie très faible dans deux classes seulement : les fils de petits cols blancs et de fermiers (tableau n° V-2).

Tableau V-1 Profession du père (question 11a)

	ICF	ICA
Professionnel	20	25
Semi-professionnel	23	36
	43	61
Col blanc	16	15
Ouvrier spécialisé	21	12
Ouvrier non spécialisé	11	5
	32	17
Fermier	9	7

Tableau V-2 Taux d'endogamie ethnique\*

Profession du père	ICF	ICA
Professionnel	1,90	1,13
Semi-professionnel	0,94	1,12
Col blanc	1,90	0,56
Ouvrier	1,70	1,35
Fermier	2,00	0,55
Taux moyen	1,68	0,94

\* Les taux d'endogamie se calculent comme les taux de mobilité et de stabilité décrits à la page 27.

On note par ailleurs une tendance plus marquée chez les ICA que chez les ICF à choisir l'épouse dans une classe professionnelle supérieure à celle du père. Ce taux est de 1,10 chez les premiers alors qu'il n'atteint même pas l'unité (0,87) chez les seconds. Quelle que soit la classe sociale de leur père, les ICA choisissent leur épouse dans un milieu correspondant à leur statut personnel, alors que chez les ICF le statut social du père exerce une certaine influence.

Tableau V-3 Profession du père de l'ingénieur et du père de l'épouse

Profession du père de l'épouse		Profession du père de l'ingénieur					
		Toutes les professions	Profes- sionnel	Semi-pro- fessionnel	Col blanc	Ouvrier	Fermier
<i>Ingénieurs canadiens-français</i>							
Profes- sionnel	%	17,9	24,0	22,2	10,0	5,8	10,0
	taux		1,90*	1,24	0,56	0,32	0,56
Semi-pro- fessionnel	%	31,6	38,0	29,6	27,5	26,1	30,0
	taux		1,20	0,94*	0,87	0,83	0,95
Col blanc	%	15,8	12,0	18,5	30,0	14,5	-
	taux		0,76	1,17	1,90*	0,92	-
Ouvrier	%	24,7	12,0	24,1	22,5	42,0	40,0
	taux		0,49	0,98	0,91	1,70*	1,62
Fermier	%	10,0	4,0	7,4	10,0	11,6	20,0
	taux		0,40	0,74	1,00	1,16	2,00*
<i>Échantillon</i>		<i>233</i>	<i>50</i>	<i>54</i>	<i>40</i>	<i>69</i>	<i>20</i>
<i>Ingénieurs canadiens-anglais</i>							
Profes- sionnel	%	17,9	20,3	17,6	26,5	10,3	27,8
	taux		1,13*	0,98	1,48	0,57	1,55
Semi-pro- fessionnel	%	31,6	28,8	35,3	44,1	23,1	38,9
	taux		0,91	1,12*	1,39	0,73	1,23
Col blanc	%	15,8	18,6	12,9	8,8	23,1	11,1
	taux		1,18	0,82	0,56*	1,46	0,73
Ouvrier	%	24,7	20,3	20,0	17,6	33,3	16,7
	taux		0,82	0,81	0,71	1,35*	0,68
Fermier	%	10,0	11,9	14,1	2,9	10,3	5,5
	taux		1,19	1,41	0,29	1,03	0,55*
<i>Échantillon</i>		<i>235</i>	<i>59</i>	<i>85</i>	<i>34</i>	<i>39</i>	<i>18</i>

\* Taux d'endogamie.

Si la profession du père constitue un indice important quant à la classe sociale d'origine, son niveau d'éducation en représente un autre également valable. Ici apparaît une différence très nette entre les deux groupes : 45 % des pères des ICF n'ont fait que des études primaires contre 25 % chez les ICA. Au niveau supérieur, les deux groupes présentent une configuration semblable. C'est au niveau moyen — c'est-à-dire de la huitième à la treizième année inclusive — que la différence s'accroît : 56 % chez les ICA, contre 34 % chez les ICF.

Tableau V-4 Scolarité du père (question 11b)

	Primaire	Secondaire			Baccalauréat ou études universitaires
		Total	8-9-10	11-12-13	
Pères des ICA	25,2	56,1	30,5	25,6	18,7
Pères des ICF	45,4	34,2	20,1	14,1	20,4

Un troisième indice de la classe sociale d'origine est la taille de la famille d'origine. Les différences entre ICA et ICF apparaissent là encore très nettes. La moitié des ICA sont originaires de familles d'un ou deux enfants contre 17 % chez les ICF. Les proportions se renversent au niveau des familles de cinq enfants ou plus : 50,5 % des ICF proviennent de familles nombreuses contre 15,2 % chez les ICA.

Tableau V-5 Taille de la famille des ICF classés par âge (question 3a)

Nombre d'enfants dans la famille	39 ans et moins	40 ans et plus
1-2	11,2	26,0
3-4	35,8	26,0
5 et plus	52,0	48,0

Ces trois indices concourent donc à démontrer que les ICF sont d'origine plus modeste que les ICA.

Il paraît important de noter que l'origine des ICF de moins de 40 ans est encore plus modeste que celle de leurs aînés, et cela au même niveau pour les trois indices utilisés. Ils sont originaires de familles plus grandes (tableau n° V-6).

Le père du jeune ICF a étudié moins longtemps et atteint une strate professionnelle moins élevée. Il est intéressant de remarquer que les jeunes sont plus souvent fils de fermier ou fils d'ouvrier.



Tableau V-6 Scolarité et profession du père des ICF classés par âge  
(questions 11a et 11b)

Scolarité	39 ans et moins	40 ans et plus	Profession	39 ans et moins	40 ans et plus
Primaire	46,8	41,7	Professionnel	16,3	28,5
8-9-10	22,3	13,9	Semi-pro- fessionnel	20,4	29,9
11-12-13	13,2	16,7		36,7	58,4
			Col blanc	15,8	15,6
Baccalauréat ou études univer- sitaires	17,7	27,7	Ouvrier spécialisé	23,5	15,6
			Ouvrier non spécialisé	13,2	5,2
				36,7	20,8
			Fermier	11,7	5,2

Chez les ICA, les jeunes sont originaires de familles moins nombreuses que les 40 ans et plus. Leur père est cependant un peu plus souvent ouvrier, plus rarement semi-professionnel et moins souvent fermier. On remarque, d'autre part, qu'il a reçu une éducation plus poussée. Ces indices ne permettent cependant pas de conclure à une origine plus modeste de l'un ou l'autre groupe d'âge (tableaux nos V-7 et V-8).

Tableau V-7 Taille de la famille, chez les ICA classés par âge  
(question 3a)

Nombre d'enfants dans la famille	39 ans et moins	40 ans et plus
1-2	56,4	41,7
3-4	32,1	30,9
5 et plus	11,5	27,4

Si l'on pousse plus loin l'étude comparative de la mobilité et si l'on considère les grands-pères paternels\*, l'écart entre les ICA et les ICF, dans les deux catégories supérieures, demeure constant (15 % à l'avantage des premiers). Mais le fait important à souligner, c'est le taux de grands-pères fermiers : 40 % chez les ICF contre 27 % chez les ICA (tableau no V-9). Le nombre d'enfants dans la

\* Lorsqu'on considère la profession du grand-père maternel de l'interviewé, on obtient des distributions semblables à celles des grands-pères paternels.

famille du père soulignerait la même tendance (tableau n° V-10). Les pères des ICA sont issus de familles relativement nombreuses : 40 % sont issus de familles de 4 ou 5 enfants. Chez les ICF, si 17,5 % des pères proviennent de familles de 3 enfants et moins, un quart de l'échantillon provient cependant de familles de 9 enfants et plus.

Tableau V-8 Sclolarité et profession du père, chez les ICA classés par âge (questions 11a et 11b)

Sclolarité	39 ans et moins	40 ans et plus	Profession	39 ans et moins	40 ans et plus
Primaire	22,5	28,8	Professionnel	24,8	25,4
8-9-10	31,0	30,4	Semi-pro- fessionnel	28,9	43,4
11-12-13	23,3	27,2		53,7	68,7
			Col blanc	18,6	10,5
Baccalauréat ou études univer- sitaires	23,3	13,6	Ouvrier spécialisé	14,5	9,7
			Ouvrier non spécialisé	7,6	3,0
				22,1	12,7
			Fermier	5,6	8,2

Tableau V-9 Profession du grand-père (question 11d)

	ICA	ICF
Professionnel	13	8
Semi-professionnel	36	26
	49	34
Col blanc	7	4
Ouvrier spécialisé	15	14
Ouvrier non spécialisé	2	8
	17	22
Fermier	27	40

Tableau V-10 Taille de la famille du père (question 11c)

Nombre d'enfants	ICA	ICF
1-2	17,0	7,6
3-4	33,6	22,7
5-6	32,6	28,4
7-8	11,3	17,2
9 et plus	5,3	24,1

### *Dynamique de la situation*

Une comparaison entre la profession du père des ingénieurs et celle de leur grand-père nous permet d'avoir une vue dynamique de la situation et de dire lesquels, des pères des ICA ou des ICF, ont connu une mobilité plus grande.

L'étude se limitera d'abord à la population des ingénieurs nés au Québec, afin de comparer des groupes plus homogènes quant à la situation économique à laquelle ils devaient faire face, ou mieux, quant à la situation du marché de l'emploi qui prévalait (tableau n° V-11).

On observe que les pères des ICA ont connu une mobilité ascendante plus grande que les pères des ICF, avec, comme taux moyen\*, 0,98 contre 0,85.

Les taux moyens de stabilité sont à peu près semblables dans les deux groupes, les indices de stabilité étant cependant plus grands, dans les catégories supérieures, chez les pères des ICA que chez les pères des ICF : professionnels (2,89 contre 1,92), semi-professionnels (1,86 contre 1,00). Par contre, comme l'indique le tableau V-11, les indices de stabilité sont plus grands chez les ICF que chez les ICA dans les catégories professionnelles inférieures : ouvriers (1,79 contre 0,99), fermiers (2,62 contre 2,53).

Si l'on compare les taux de mobilité et de stabilité des pères des ICA qui sont nés au Québec et de ceux qui sont nés en dehors, on note tout d'abord que leur mobilité ascendante est sensiblement la même (1,04 contre 0,98). Par ailleurs, leur stabilité est un peu plus marquée dans toutes les catégories professionnelles. Les écarts ne sont toutefois pas très grands, moins grands entre les ICA nés au Québec et le groupe ICF.

Ces observations permettraient donc de conclure que non seulement les ICF sont d'origine plus modeste que les ICA, mais, comme l'indique la différence de vitesse dans la mobilité observée chez les pères des ingénieurs des deux groupes, que l'écart tendait à augmenter, dans cette génération, entre ICF et ICA.

---

\* Les taux de mobilité et de stabilité sont obtenus en comparant, à la structure professionnelle globale, la répartition des professions des fils qui avaient la même occupation que leur père. Si cette répartition est semblable à celle de la population globale, le taux obtenu est égal à 1. S'il y a concentration des fils d'une catégorie au sein d'une profession, le taux, pour celle-ci, est supérieur à 1. Il y a ainsi, chez les ICA nés hors du Québec (proportionnellement) 3 fois plus de fils de professionnels qui deviennent professionnels que dans la population globale. Ce taux a été élaboré par Nathalie Rogoff dans *Recent Trends in Social Mobility*, The Free Press, Glencoe (Illinois), 1953.

Tableau V-11 Profession du père et du grand-père

Profession du père		Profession du grand-père de l'ingénieur					
		Toutes les professions	Professionnel	Semi-professionnel	Col blanc	Ouvrier	Fermier
<i>ICF (nés au Québec)</i>							
Professionnel	%	21,3	41,0	31,3	12,5	13,5	12,0
	taux		1,92*	1,47	0,59	0,63	0,56
Semi-professionnel	%	24,9	17,6	25,0	25,0	19,2	19,6
	taux		0,71	1,00*	1,00	0,77	0,79
Col blanc	%	14,8	23,5	20,3	50,0	11,5	12,0
	taux		1,59	1,37	3,38*	0,78	0,81
Ouvrier	%	31,1	5,9	23,5	12,5	55,8	35,9
	taux		0,19	0,76	0,40	1,79*	1,15
Fermier	%	7,9	11,8	-	-	-	20,7
	taux		1,49	-	-	-	2,62*
<i>Echantillon</i>		<i>233</i>	<i>17</i>	<i>64</i>	<i>8</i>	<i>52</i>	<i>92</i>
<i>ICA (nés au Québec)</i>							
Professionnel	%	21,3	61,5	21,4	25,0	15,4	13,3
	taux		2,89*	1,00	1,17	0,72	0,62
Semi-professionnel	%	24,9	23,0	46,4	25,0	38,4	40,0
	taux		0,92	1,86*	1,00	1,54	1,60
Col blanc	%	14,8	15,3	7,1	-	15,4	6,7
	taux		1,03	0,48	-	1,04	0,45
Ouvrier	%	31,1	-	25,0	50,0	30,8	20,0
	taux		-	0,80	1,61	0,99*	0,64
Fermier	%	7,9	-	-	-	-	20,0
	taux		-	-	-	-	2,53*
<i>Echantillon</i>		<i>73</i>	<i>13</i>	<i>28</i>	<i>4</i>	<i>13</i>	<i>15</i>

Tableau V-11 (suite)

Profession du père		Profession du grand-père de l'ingénieur					
		Toutes les professions	Profes- sionnel	Semi-pro- fessionnel	Col blanc	Ouvrier	Fermier
<i>ICA (nés hors du Québec)</i>							
Profes- sionnel	%	21,3	68,8	20,8	28,6	12,5	25,6
	taux		3,23*	0,98	1,34	0,59	1,20
Semi-pro- fessionnel	%	24,9	12,5	49,1	57,2	33,3	32,6
	taux		0,50	2,00*	2,30	1,34	1,31
Col blanc	%	14,8	6,3	20,8	14,3	12,5	7,0
	taux		0,43	1,40	0,97*	0,84	0,46
Ouvrier	%	31,1	6,3	5,7	-	37,5	13,9
	taux		0,20	0,18	-	1,20*	0,44
Fermier	%	7,9	6,3	3,8	-	4,0	20,9
	taux		0,80	0,48	-	0,50	2,64*
<i>Échantillon</i>		<i>143</i>	<i>16</i>	<i>53</i>	<i>7</i>	<i>24</i>	<i>43</i>

\* Taux de stabilité professionnelle intergénérationnelle.

## 2. La mobilité par rapport aux frères

Les professions des frères peuvent constituer un autre indice quant à la position sociale du milieu d'origine des ingénieurs. Elles ont été classées en sept catégories, 1 étant la catégorie professionnelle la plus élevée, et 7 la plus basse.

Tableau V-12 Profession des frères (question 3c)

Catégorie professionnelle	ICF	ICA
1	16,9	23,6
2	7,4	3,9
3	29,1	31,5
	53,4	59,0
4	23,5	23,6
5	13,1	9,6
6	5,2	3,9
7	5,2	3,9

Ce qui permet de dire qu'il n'y a pas de différence marquée dans l'emploi des frères des ingénieurs et que la majorité d'entre eux sont des professionnels ou des semi-professionnels (catégories 1, 2 et 3 : ICA, 59 % et ICF, 53 %); la différence la plus nette se situe au niveau le plus élevé, à l'avantage des ICA.

Cette égalité dans la répartition des professions des frères peut signifier un rattrapage par accélération de la mobilité au niveau de la troisième génération des ICF. Mais elle peut n'être qu'apparente et résulter d'interférences telles que l'absence de frère chez 16,9 % des ICA et seulement 4,7 % des ICF.

## 3. Le groupe d'appartenance et l'identification sociale

Les ingénieurs des deux groupes ethniques se distinguent donc quant à leur milieu d'origine. Qu'en est-il de leur milieu social et de leur sentiment d'appartenance sociale ? Une première question au sujet du statut professionnel de leurs trois meilleurs amis a donné les résultats suivants :

Tableau V-13 Profession des trois meilleurs amis (question 99a)

	ICA	ICF
Professionnels et ingénieurs	62,3	70,4
Semi-professionnels et cols blancs	35,9	27,2
Ouvriers et agriculteurs	1,8	2,4



Deux faits à remarquer : la tendance qu'ont plus fréquemment les ICF à lier amitié avec les classes supérieures et à l'inverse les liens plus fréquents avec la classe moyenne chez les ICA. L'analyse de ces résultats devrait cependant être éclairée par une comparaison avec les structures professionnelles de l'ensemble de la population.

Les réponses à une question invitant les ingénieurs à nommer trois types de personnes situées, de par leur profession, dans la même classe sociale qu'eux, tendent à confirmer ce résultat : la perception d'appartenance correspondrait au type d'amis qu'ont les ingénieurs de chaque groupe.

Tableau V-14 Perception de classe : catégories de professions signalées par l'interviewé comme ayant le même statut que la sienne (question 64a)

	ICA	ICF
Seulement des professionnels	35,9	55,3
Majorité de professionnels et quelques semi-professionnels	37,5	28,2
Majorité de semi-professionnels	20,1	11,7
Classes inférieures	6,6	4,9

Soulignons que 85 % des ICF trouvent leurs amis dans leur groupe ethnique, alors que ce pourcentage est seulement de 67 chez les ICA (question 99b).

## B. La carrière professionnelle

### 1. L'entrée dans la carrière

La mobilité de l'ingénieur ne s'arrête pas à la comparaison de son statut social avec celui de sa famille; il peut chercher à accomplir et franchir certaines étapes dans sa carrière professionnelle.

Peut-on déceler dans la population un fonds d'attitudes qui soutiendrait l'hypothèse selon laquelle le milieu C.F. ne s'est traditionnellement guère montré favorable aux professions industrielles ? Certes, la population étudiée se trouve située dans un groupe a priori mieux disposé envers cette profession, mais ce choix peut s'accompagner d'un accueil plus ou moins favorable du milieu familial et le sujet lui-même a pu connaître des conflits de préférence.

Les pères des ICF sont satisfaits de ce choix dans 85 % des cas contre 94 % chez les ICA, l'écart étant à peu près semblable chez les sujets eux-mêmes. Dans l'un et l'autre groupe, 75 % n'avaient pas d'autres préférences (question 17a) et, s'ils devaient recommencer leur carrière, ils n'en choisiraient pas une autre (ICF : 68,6 %;

ICA : 73,5 %). Parmi ceux qui indiquent une telle préférence, c'est la profession de médecin qui est la plus fréquemment mentionnée, tant chez les ICA que chez les ICF. Elle l'est plus fréquemment encore en termes de carrière (tableau n° V-15).

Autre différence à signaler, cependant, au niveau des motifs le plus souvent invoqués qui n'ont pas permis le choix d'une autre profession : le manque d'argent chez les ICA, le manque d'orientation chez les ICF.

Les deux groupes se différencient-ils pour ce qui est des voies d'accès au travail ? C'est par l'université que l'on obtient le plus souvent le premier emploi (tableau n° V-16).

Dans les deux cas, les relations de famille n'ont guère d'importance, mais il y a une tendance plus marquée chez les ICA à utiliser le jeu de l'offre et de la demande, que l'on retrouve d'ailleurs lorsqu'il s'agit de changer d'emploi.

Les raisons invoquées pour motiver le choix d'un emploi sont, dans l'ordre : intérêt pour le travail (57 %); avancement (26 %); indépendance (11 %). À de légères différences près, les deux groupes suivent le même ordre de priorité.

Tableau V-15 Professions permettant une carrière intéressante (question 46)

	ICA	ICF
Médecin	15,4	28,4
Ingénieur	46,3	36,7
Industriel	14,0	13,5
Professeur d'université	8,8	7,6
Propriétaire de commerce	7,7	10,5
Autres (courtier, avocat, politicien)	7,7	3,3

ftp

Tableau V-16 Mode d'obtention du premier emploi (question 15a)

	ICA	ICF
Recrutement à l'université	42,6	51,4
Relations et famille	12,2	15,9
Annonces et demandes	38,8	29,3
Autres	6,6	3,3

$P^* = 0,02$

\* Ce paramètre  $P$  indique le seuil de signification.

Les ingénieurs ont-ils une préférence pour la petite ou la grande entreprise, l'entreprise privée ou publique ? Cette question a été abordée indirectement en leur demandant quel conseil ils donneraient sur ce point à un jeune ingénieur (tableau n° V-17).

Chez les ICA, 82 % préfèrent l'entreprise privée, contre 63 % chez les ICF, alors que seulement 5,6 % et 7 %, respectivement, marquent une préférence pour la fonction publique et les régies publiques. En revanche, deux différences importantes apparaissent : une préférence marquée chez les ICA pour la grande entreprise privée et chez les ICF pour les bureaux d'ingénieurs et la grande entreprise. Ces résultats doivent être considérés avec l'ensemble des questions traitant des régimes économiques, lesquels seront abordés plus longuement par la suite.

Quant aux motifs invoqués (question 29b), c'est la possibilité, pour le jeune ingénieur, d'acquérir une expérience précieuse qui est valorisée par les deux groupes (ICF, 51 %; ICA, 63 %). Cette motivation commune peut expliquer les choix précédents : le très grand nombre d'entreprises privées permet plus que la régie publique l'acquisition d'expériences multiples.

Cette interprétation pourrait être confirmée par les réponses aux questions tendant à savoir où les ingénieurs ont le plus de chances de réaliser leurs possibilités (question 44). C'est une préférence pour la petite entreprise qui se manifeste, plus forte cependant chez les ICF (53 % contre 61 %). Le raisonnement qui se situe au niveau de l'expérience qu'un jeune peut acquérir, favorise plutôt la grande entreprise, mais au niveau de la réalisation ultérieure de ses possibilités, c'est la petite entreprise qui reçoit le plus de faveur.

Tableau V-17 Type d'entreprise préféré (question 29a)

	ICA	ICF
Petite entreprise privée	30,2	31,8
Fonction publique	1,6	3,9
Grande entreprise privée	52,4	31,0
Régie publique	4,0	2,7
Bureau d'ingénieur-conseil	11,9	30,6
$P = 0,001$		

## 2. L'aspiration à la mobilité

La mobilité se réalise de deux façons principales : par création de sa propre entreprise, par promotion dans l'entreprise. Dans ce dernier cas, la mobilité géographique peut présenter un obstacle que les deux groupes ne franchissent pas avec la même facilité.

Quant au projet de partir à son compte, les tentatives et les réussites sont plus nombreuses chez les ICF. La proportion élevée (77 %) d'ICF parmi les ingénieurs-conseils de l'échantillon indique que c'est la participation à ce type de firme qui crée vraisemblablement la différence (tableau n° V-18).

Il n'y a pas de différence significative dans les estimations de promotion. On constate seulement une concentration un peu plus grande des ICF dans la catégorie de promotion limitée, bien que leur nombre, plus élevé chez les moins de 40 ans, qui ont par conséquent une carrière professionnelle encore longue devant eux, ait pu laisser présager le contraire. Cette hypothèse sera précisée dans le chapitre portant sur les différences entre générations (tableau n° V-19).

Tableau V-18 Établissement à son compte (questions 14a, 14b et 14c)

	ICA	ICF
N'y ont pas songé	51,3	50,0
Y ont songé	48,7	50,0
Y ont songé sans essayer	47,0	29,9
Y ont songé, essayé et réussi	10,0	16,1
Y ont songé, essayé et échoué	1,7	4,0

Tableau V-19 Promotion prévue dans l'entreprise (question 20)

Promotion à un poste	ICA	ICF
Un peu plus élevé	32,4	40,6
Nettement supérieur	44,9	38,4
À la direction, ou au sommet	22,7	21,0
		non sign.

Tableau V-20 Attitude à l'égard d'un emploi hors de Montréal (questions 21a, 21b et 21c)

Accepteraient d'être promus ailleurs	ICA	ICF
Au Québec	70,3	69,9
Au Canada	85,2	53,0
Hors du Canada	69,0	51,7

D'une façon générale, les ICF sont plus que les ICA attachés au Québec, puisque près de 50 % d'entre eux seraient prêts à refuser une promotion qui les obligerait à le quitter. Il faut noter cependant que « ailleurs au Canada » est, pour les 65 % d'ICA nés hors du Québec, l'équivalent de « ailleurs au Québec » pour les ICF, bien que 52 % seulement des ICA aient fait leurs études hors de cette province.

Quelle est l'attitude à ce sujet des 35 % d'ICA nés au Québec ? 23 % d'entre eux refuseraient une promotion ailleurs au Canada contre 10 % chez ceux qui sont nés hors du Québec. L'attachement au Québec est donc partiellement lié, sur ce point, au fait d'y être né.

L'attitude des épouses des ingénieurs va généralement dans le même sens que les réponses observées dans la question principale. De l'avis de leurs maris, leurs attitudes ne constitueraient pas un obstacle à ce niveau.

Tableau V-21 Attitude de l'épouse à l'égard d'un emploi hors de Montréal (question 21d)

	Épouses des ICA	Épouses des ICF
Accepteraient	90,4	75,1
Refuseraient	9,6	24,9
$P = 0,001$		

Cette acceptation ou ce refus de mobilité géographique vont-ils de pair avec la perception de l'endroit où les chances de promotion sont meilleures ? Le tableau n° V-22 nous éclaire sur ce point.

Les attitudes des deux groupes apparaissent là en complète opposition. Les ICA, à part quelque 9 % d'entre eux, ne croient pas que le Québec soit leur terrain privilégié de promotion. En revanche, c'est surtout au Québec que les ICF perçoivent leurs chances d'avancement.

Il est à remarquer que les ICA donnent aux États-Unis, comme terrain de promotion, une importance légèrement supérieure à celle qu'ils accordent au Canada. Parmi les 19 % de Québécois qui envisageraient une promotion hors du Québec, 3 % seulement choisiraient le Canada et 16 % les USA.

Tableau V-22 Milieu favorisant la réussite (question 24a)

	ICA	ICF
Québec	9,3	80,3
Canada	41,3	3,0
États-Unis	47,8	16,4
Ailleurs	1,6	0,4
$P = 0,001$		



Quant aux motifs de réussite invoqués, ils concernent tout autant les conditions d'emploi, la prospérité de l'économie, l'état du marché de l'emploi des ingénieurs que la promotion, et on ne relève aucune différence significative entre les deux groupes (question 24b).

### 3. La perception de la carrière

On a vu précédemment que les ICA tendent à des niveaux de promotion supérieurs à ceux auxquels aspirent les ICF. Par quelles voies les ingénieurs des deux groupes espèrent-ils réaliser cette mobilité ? Ceci se pose d'abord en termes de qualités personnelles privilégiées.

Tableau V-23 Facteurs contribuant à la réussite (question 30)

	ICA	ICF
Qualités morales	14,1	11,6
Travail	19,0	46,0
Talent	32,8	18,5
Ambition	21,4	13,4
Éducation	9,7	3,6
Autres	3,1	6,9

ftp

Tableau V-24 Qualités personnelles contribuant à la réussite (question 31)

	ICA	ICF
Persévérance et puissance de travail	8,3	20,3
Doigté	44,6	13,8

$P = 0,001$

On peut déceler chez les ICF une tendance à privilégier les qualités à acquérir et, chez les ICA, les qualités acquises. Autrement dit, les ICF éprouvent plus le besoin de se retrancher sur le travail pour se faire valoir.

Tableau V-25 Choix d'un emploi requérant des qualités acquises ou à acquérir (question 40)

Choisiraient un poste requérant	ICA	ICF
Des qualités acquises	43,2	36,0
Des qualités à acquérir	56,8	64,0

non sign.



Si les qualités professionnelles sont privilégiées par les ICF, on peut s'attendre à ce qu'ils soient plus disposés à augmenter leur nombre d'heures de travail en vue d'une promotion. C'est ce qui apparaît en effet dans les réponses à la question 35a (tableau n° V-26).

De même que les ICF valorisent plus les qualités professionnelles, ils ont tendance à exprimer plus d'insatisfaction quant à la validité du salaire et du poste comme indices de mérite (tableau n° V-27).

Si l'on s'en tient à cette hypothèse, on décèle chez les ICF une valorisation plus grande des postes de gestion et chez les ICA une recherche des postes impliquant des possibilités de création, bien que ceux-ci soient aussi les plus recherchés par les ICF. Mais quel est le sens des responsabilités recherchées ? Les aspirations gestionnaires dans l'entreprise sont significativement différentes dans les deux groupes (tableau n° V-28).

Tableau V-26 Promotion et heures de travail supplémentaires (question 35a)

Nombre d'heures supplémentaires acceptées	ICA	ICF
Aucune	31,4	26,2
10	39,0	33,8
15	18,4	16,7
20 et plus	11,2	23,2
ftp		

Tableau V-27 Le salaire et le poste d'un individu comme indices valides de son mérite (question 39)

	ICA	ICF
Oui	64,8	46,5
Non	35,2	53,5
$P = 0,001$		

Tableau V-28 Aspects du travail qui plaisent (question 38a)

	ICA	ICF
Créativité	59,1	45,1
Responsabilité	14,8	24,6
Technique	12,1	15,3
Relations, contacts	9,8	10,1
Réussite de l'entreprise	4,2	4,8
$P = 0,01$		

Il ne fait aucun doute que l'on se trouve ici devant une aspiration très fortement gestionnaire chez les ICF, partagée néanmoins par 52 % des ICA; il n'y a pas de différence à ce niveau quant à la classe d'âge (tableau n° V-29).

Cette aspiration gestionnaire aurait-elle le sens d'une recherche de responsabilités administratives ? Tel ne semble pas être le cas, si l'on en juge par les réponses qui portaient sur l'aspiration aux fonctions administratives (tableau n° V-30).

Il y aurait donc deux types d'aspirations assez nettement contrastées, les unes orientées vers des responsabilités administratives, les autres vers des responsabilités gestionnaires. Certes, nous l'avons vu, ces deux tendances existent dans les deux groupes, chacune étant plus caractéristique de l'un ou l'autre groupe.

Tableau V-29 Attitude à l'égard de la participation à la gestion de l'entreprise (question 34)

	ICA	ICF
Les ingénieurs devraient être associés plus étroitement à la gestion	52,2	82,7
Ils le sont suffisamment	47,8	17,3
		$P = 0,001$

Tableau V-30 Attitude rétrospective à l'égard d'une formation technique ou administrative (question 17f)

	ICA	ICF
Technique	43,6	52,8
Administrative	48,0	36,2
Les deux	8,4	10,9

Chez les ICA, on décèle une orientation plus nette vers les responsabilités administratives et moins d'aspiration gestionnaire. En revanche, chez les ICF, le refus de considérer le salaire comme mesure du mérite, la préférence pour le salaire au rendement, plus proche du travail d'exécution, ainsi que l'aspiration à une formation technique plus poussée, renvoient non pas à une forte aspiration aux tâches administratives, mais au-delà de celles-ci, à la combinaison de fonctions techniques avec possibilités de contrôle de la gestion d'entreprise.

#### 4. Le rôle des ingénieurs dans l'économie

Ces deux orientations se retrouvent dans l'image du rôle que l'ingénieur joue dans l'économie.

Dans les deux groupes, c'est la spécialisation qui caractérise le rôle des ingénieurs dans l'économie. Les ICA attribuent plus d'importance à l'influence qu'ils exercent sur l'économie par des responsabilités au niveau de la politique des entreprises, alors que les ICF font ressortir plus fréquemment le caractère technique de leurs fonctions (tableau n° V-31).

Mais qu'en est-il dans la réalité ? Comme nous l'avons vu au chapitre IV, les ICA, qui représentent 51 % de la population totale, occupent dans l'échantillon 61 % des postes administratifs.

Les jeunes ICF sont nettement sous-représentés dans les postes administratifs puisque, constituant 35 % de la population, ils n'en occupent pas plus de 20 %; quant aux jeunes ICA, ils ne sont que faiblement surreprésentés au bénéfice de la classe des plus de 40 ans (tableau n° V-32).

Ces tableaux ne nous renseignent cependant pas sur les niveaux différentiels à l'intérieur des postes administratifs. Néanmoins, un

Tableau V-31 Perception du rôle de l'ingénieur dans l'économie (question 33a)

Rôle perçu	ICA	ICF
Spécialiste	58,5	66,8
Politique d'entreprise	34,2	21,2
Associations professionnelles et rôles civiques	7,4	12,1

ftp

Tableau V-32 Répartition de la population et des postes administratifs selon l'ethnie et l'âge (question 9g)

	Population %	Postes administratifs %
ICA 39 ans et moins	27,0	23,7
40 ans et plus	24,2	37,4
ICF 39 ans et moins	35,3	20,1
40 ans et plus	13,6	18,7

Tableau V-33 Salaire des ingénieurs occupant des postes administratifs (question 10)

	ICA	ICF
Moins de \$ 11 000	26,1	24,5
De \$ 11 000 à 16 999	38,6	49,0
\$ 17 000 et plus	35,0	26,0

indice, celui des salaires, permet d'avancer une approximation à ce sujet.

Cette répartition doit cependant être encore précisée par les secteurs d'emploi. Les ICF se trouvent également répartis entre la petite entreprise et les bureaux d'ingénieurs-conseils d'une part, et les services publics d'autre part, leur représentation la plus faible dans les postes administratifs se situant dans la grande entreprise. Chez les ICA, la représentation est massive dans la grande entreprise et presque inexistante dans les services publics.

Si l'on trouve plus d'ICA dans les zones inférieures de la petite entreprise et des bureaux d'ingénieurs-conseils, la situation par contre est inverse dans la grande entreprise où les ICF sont surreprésentés dans les zones inférieures et sous-représentés dans les zones supérieures.

Tableau V-34 Répartition des ingénieurs occupant des fonctions administratives selon les secteurs d'emploi et les tranches de salaire

Secteurs	ICA %	Tranches de salaire* %		ICF %	Tranches de salaire %	
Petite entreprise, ingénieurs-conseils	22	1	26	35	1	11
		2	26		2	44
		3	47		3	44
Grande entreprise	74	1	26	26	1	36
		2	42		2	43
		3	32		3	21
Hydro - Villes - Gouvernements	4	1	25	39	1	25
		2	50		2	60
		3	25		3	15
		N	= 88		N	= 54

\* Les tranches de salaires sont les suivantes : 1 = moins de \$ 11 000; 2 = de \$ 11 000 à 16 999; 3 = \$ 17 000 et plus.

Si l'on admet l'hypothèse selon laquelle c'est la grande entreprise qui exerce le plus d'influence sur la vie économique, on pouvait s'attendre — comme nous l'avons constaté — à ce que les ICA estiment exercer leur influence sur la vie économique par le canal de la politique des entreprises. Mais est-ce dire, pour autant, que les ingénieurs interviewés sont satisfaits de cette situation de fait ?

Par comparaison avec le rôle économique joué (question 33a), peu d'ingénieurs de l'un ou l'autre groupe désireraient s'affirmer par un rôle de spécialiste, alors que dans une proportion assez grande ils aspireraient à un rôle dans la politique des entreprises. Mais le décalage entre la réalité perçue et les aspirations à une participation aux décisions est plus marqué chez les ICF, qui apparaissent à nouveau comme plus insatisfaits dans ce domaine. Par contre, même au niveau des aspirations, les ICA sont plus nombreux que les ICF à être attirés par les postes administratifs (tableau n° V-35).

Cette hypothèse se trouve confirmée en sens inverse par les réponses à une dernière question qui demandait aux ingénieurs s'ils se considéraient comme trop, pas assez ou assez spécialisés (tableau n° V-36).

En dehors d'une majorité, équivalente dans les deux groupes, qui s'estime suffisamment spécialisée, les ICA trouvent qu'ils le sont trop et les ICF pas assez. Ceci peut s'interpréter de la façon suivante : l'accès plus fréquent des ICA aux postes administratifs, particulièrement dans la grande entreprise, ne les pousse pas à rechercher une plus grande spécialisation dans leur formation de base,

Tableau V-35 Rôle économique désiré (question 33b)

	ICA	ICF
Spécialistes	45,1	50,2
Décisions politiques des entreprises	44,1	36,5
Associations professionnelles et rôles civiques	10,7	13,4
		non sign.

Tableau V-36 Attitude à l'égard du degré de spécialisation des ingénieurs (question 25)

Les ingénieurs sont	ICA	ICF
Trop spécialisés	29,3	17,9
Pas assez	13,8	26,5
Assez	56,9	55,6
		$P = 0,001$



alors que c'est au contraire par cette voie technique que de nombreux ICF peuvent escompter une promotion. Rappelons à ce propos que le taux de spécialisation post-universitaire est équivalent dans les deux groupes : 25 % chez les ICF et 24 % chez les ICA.

### *Conclusion*

Les premiers résultats de ces analyses confirment les hypothèses que l'on pouvait émettre sur la base d'une connaissance du système de classes au Québec : les ingénieurs canadiens-français sont le produit de groupes sociaux moins bien représentés dans la classe supérieure que dans la classe inférieure; 36 % d'entre eux sont fils d'ouvriers, taux exceptionnellement élevé dans les sociétés avancées, contre seulement 17 % chez les ingénieurs canadiens-anglais. L'écart entre les deux groupes, quant à l'appartenance à la classe ouvrière, n'était pas aussi grand à la génération précédente, ce qui indique que la population ouvrière anglaise est restée constante durant deux générations, alors que la population française est passée de l'emploi agricole à l'emploi industriel : 40 % des grands-pères des ingénieurs canadiens-français étaient des fermiers.

Les différences s'accroissent en terme d'instruction et, si les milieux sociaux d'origine sont différents, elles s'expriment surtout de deux façons : les pères des ingénieurs canadiens-français sont moins instruits et leurs familles sont généralement plus nombreuses, ce dernier modèle correspondant à celui de leur propre famille d'origine.

Mais le point le plus important à souligner ici est sans doute que les différences dans les vitesses de mobilité s'accroissent entre ICA et ICF. Si, en effet, le groupe d'origine ouvrière reste constant chez les ICA alors qu'il tend à croître chez les ICF, c'est qu'il y a passage plus fréquent des ICA vers des strates plus élevées. Ceci a pour conséquence d'isoler plus fortement les ICF de leur groupe d'origine, ce qui se traduit par un réseau de relations sociales plus orienté vers la strate dont on fait partie personnellement.

Cette base d'appartenance sociale s'accompagne-t-elle d'orientations différentes, en terme de projets individuels de carrière ou de mobilité ? Notons, au départ, que si la fonction d'entrepreneur attire encore près de 50 % de chacun des groupes, elle n'exerce une attraction efficace que dans 10 à 15 % des cas. On souhaiterait vivre l'aventure « entrepreneuriale », on y pense, mais on ne la tente que rarement; 50 % n'y croient même plus du tout.

C'est l'intégration dans la grande ou la petite entreprise privée qui est recherchée, rarement la fonction publique ou la régie publique, les ICF manifestent cependant une orientation très prononcée (près d'un tiers) vers les bureaux d'ingénieurs-conseils.

Ce qui différencie profondément les deux groupes, dans cette question de carrière professionnelle, c'est le lieu géographique où elle s'accomplira. Si 85 % des ICA se montrent disposés à accepter une promotion hors du Québec, près de la moitié des ICF s'y refusent.



Cet écart se justifie par la conviction qu'ont les ICF que leurs chances de réussir sont plus grandes au Québec, pratiquement nulles au Canada, et aléatoires aux États-Unis. L'échiquier sur lequel les ICA jouent leur avenir est tout à fait différent, presque un sur dix seulement situe ses chances de promotion au Québec, considérant par ailleurs qu'elles sont plus grandes aux États-Unis que dans le reste du Canada. Il y a donc deux cadres de référence totalement différents : très nettement situé dans le Québec pour les uns, à cheval sur les États-Unis et le reste du Canada pour les autres.

Enfin, il faut rappeler dans cette conclusion les deux types d'orientation qui se manifestent à l'égard de l'entreprise. Faisant plus fréquemment appel au talent qu'au travail et accordant davantage de crédit au rôle qu'ils peuvent jouer dans l'économie à travers la politique de leur entreprise, les ICA aspirent plus souvent à des fonctions administratives, alors que les ICF se montrent prêts à investir plus de temps dans la spécialisation technique, se perçoivent plus comme techniciens, mais désirent, beaucoup plus fréquemment que les ICA, être associés à la gestion de l'entreprise. Administration et gestion sont donc les deux rôles d'orientation vers lesquels convergent les attitudes : l'aspiration à l'administration étant davantage liée à une mobilité de type individuel qui s'accomplit par une carrière ascendante; l'aspiration à la gestion étant plus le fait d'un groupe qui se définit par sa fonction de producteur.



Les ingénieurs se sentent-ils vraiment impliqués dans la vie économique ? Telle est la principale question qui se posait ici. Y répondre supposait que l'on disposât d'une certaine partie de l'information qu'ils utilisaient, ce degré d'information représentant sans doute la mesure même de leur implication.

Mais construire un tel test n'allait pas sans difficultés. Il ne s'agissait pas de se placer au niveau des connaissances théoriques, en matière d'économie, ni au niveau du praticien. Aussi nous sommes-nous arrêtés à une information dont on pouvait présumer qu'elle était offerte à toute la population étudiée : celle dispensée quotidiennement par les journaux. L'attention qui lui est portée pouvait nous donner la mesure cherchée. La consultation d'économistes, une analyse du contenu des informations publiées par la presse et le souci de trouver des questions soulevées dans la presse des deux langues permirent d'établir le test.

Ce test préliminaire établi, il devenait possible de comparer la façon dont les ingénieurs des deux groupes percevaient la vie économique du Québec, l'urgence des solutions à y apporter, les objectifs à poursuivre, les moyens à mettre en oeuvre, en ce qui concerne tant les économies concurrentes que les moyens institutionnels ou publics. Ce bilan étant fait, dans les limites que déterminaient la formulation du questionnaire et la durée des interviews, il restait à s'interroger sur la perception que, par comparaison avec d'autres groupes professionnels, les ingénieurs ont de leur apport à cette économie, et enfin sur le rôle qu'ils attribuent aux différentes classes sociales dans cette dynamique économique.

#### *A. Le test économique*

Une information approfondie au sujet de la vie économique peut constituer un indice du degré d'intérêt qui lui est accordé et du degré d'implication dans la vie économique. Le test ne permet pas

de dire qu'il y a des différences d'information entre ICF et ICA car il ressort du résultat global du test élaboré que les deux groupes se distinguent à peine.

Tableau VI-1 Score total du test économique (question 53)

Score	ICA	ICF
0-20	7,9	4,3
21-25	28,3	30,0
26-30	48,6	41,9
31-38	15,2	23,8

$P = 0,02$

Bien que les différences soient significatives à 0,02, elles s'annulent mutuellement : ce que les ICA gagnent au niveau 26-30, ils le perdent au niveau 31-38.

Lorsqu'on examine les différences au niveau de chacune des questions utilisées, il est impossible d'établir un pôle autour duquel l'information des ICA comme celle des ICF pourrait être centrée. On note certaines différences qu'il semble cependant assez facile d'expliquer. Les questions du test peuvent être groupées sous six rubriques et être étudiées séparément (pour le détail de chacune des questions, voir la question 53).

#### 1. L'actualité

Deux questions portaient sur le harnachement des chutes Hamilton et la société Brinco :

Brinco (question 53a i)	ICA	ICF
Vrai	22,3	25,1
Faux	77,7	74,9

non sign.

#### Personnes mêlées à l'affaire\* (question 53a ii)

VV	89,8	79,7
VF	8,9	18,9
FF	1,3	1,4

ftp

\* Six noms étaient présentés par couples : le premier couple (VV) était formé de deux noms exacts; le deuxième (VF), d'un nom exact et de celui d'une personne étrangère à cette affaire; enfin, le troisième (FF), de deux noms inexacts.

Au niveau de l'information concernant l'actualité économique, ces deux questions ne reflètent que peu de différences, lesquelles sont plus marquées à la deuxième question, mais les fréquences sont trop réduites pour qu'on puisse leur appliquer un test de signification. Elles indiqueraient cependant un niveau d'information quelque peu supérieur chez les ICA.

## 2. L'information générale

Deux questions portaient sur le prix de l'or et la couverture or pour les dépôts bancaires.

Prix de l'or (question 53f i)	ICA	ICF
V	77,8	83,3
F	22,2	16,7
		non sign.
Couverture or (question 53f ii)		
V	70,4	78,8
F	29,6	21,2
		non sign.

Les deux groupes diffèrent encore à ce niveau de façon non significative, les ICF marquant un léger avantage.

## 3. Les grandes entreprises canadiennes

Les deux questions suivantes avaient trait aux compagnies de bière contrôlées par Canadian Breweries et à l'origine des capitaux de la société Argus Corporation.

Canadian Breweries (question 53c i)	ICA	ICF
VV	72,5	67,2
VF	8,9	16,5
FF	18,6	16,5
		non sign.
Argus Corporation (question 53c ii)		
V	93,5	74,2
F	6,5	25,8
		$P = 0,001$

Pour la première fois, nous trouvons une différence significative. Les ICA, au niveau de l'une des deux questions, présentent une information plus grande.

#### 4. Les grandes entreprises au Québec

Quatre questions se rangeaient sous cette rubrique. Deux traitaient des affineries et de la production d'aluminium, deux autres de la compagnie Shawinigan Chemicals.

Localisation des affineries d'aluminium (question 53b i)	ICA	ICF	
VV	72,3	79,1	
VF	26,0	20,9	
FF	1,7	0,0	ftp
Production annuelle d'aluminium au Québec (question 53b ii)			
V	44,4	43,6	
F	55,6	56,4	non sign.
Localisation des usines de Shawinigan Chemicals (question 53e i)			
VV	42,7	36,8	
VF	57,3	63,2	non sign.
Contrôle financier de Shawinigan Chemicals (question 53e ii)			
V	84,8	76,7	
F	15,2	23,3	P = 0,05

Pas plus à ce niveau qu'aux niveaux abordés précédemment il n'existe de différences très significatives. Les ICF ont des connaissances quelque peu supérieures quant à la localisation des affineries d'aluminium, les ICA, quant à celle des usines de Shawinigan Chemicals et à leur contrôle financier.

#### 5. La Société générale de financement (S. G. F.)\*

Enfin, deux questions étaient posées au sujet de la S. G. F.

\* La Société générale de financement a été fondée au Québec en vue de soutenir financièrement certaines entreprises, d'en créer, ou d'en acquérir.



Membres du conseil d'administration  
(question 53d i)

	ICA	ICF
VV	28,1	23,5
VF	29,7	66,5
FF	42,2	10,0

 $P = 0,001$ Petites entreprises achetées par  
la S. G. F. (question 53d ii)

V	26,8	76,6
F	73,2	23,3

 $P = 0,001$ 

À ce niveau, les ICF étaient nettement mieux informés. Il faut cependant noter que, d'une part, les membres du conseil d'administration de la S. G. F. sont tous des francophones, et que, d'autre part, les entreprises dont il fallait dire si elles avaient été achetées par la S. G. F., étaient deux petites entreprises canadiennes-françaises. Autrement dit, les questions favorisaient nettement les ICF.

On peut donc conclure que le test d'information économique élaboré ne révèle de distinctions nettes entre ICA et ICF, à ce niveau, ni globalement, ni dans le détail. Les deux groupes manifestent, en fait, un niveau d'information relativement élevé.

*B. L'urgence et les objectifs économiques*

La nécessité de la croissance économique est un objectif indiscuté, mais on peut la souhaiter d'un certain rythme — lent ou rapide. Le choix d'une croissance rapide, si elle est réellement désirée, comporte l'acceptation de tensions plus grandes, voire de déséquilibres sociaux qui peuvent ébranler des normes ou des institutions sociales plus traditionnelles, auxquelles sont attachées des situations acquises. C'était donc ce choix qui était proposé aux ingénieurs des deux groupes.

Tableau VI-2 Rythme de croissance économique souhaité pour le Québec (question 60)

Rythme de croissance	ICA	ICF
Rapide	77,3	84,2
Lent	22,7	15,8

non sign.

Sur ce point, l'accord s'établit de façon très majoritaire : ICA et ICF souhaitent une croissance rapide, même si elle doit entraîner certains déséquilibres sociaux. Tout au plus peut-on remarquer une légère réserve chez les ICA.

Cette croissance, quels en sont les objectifs, ou, plus exactement, en quels termes sont-ils formulés ?

C'est dans les mêmes termes que les deux groupes ont répondu et si, comme on pouvait le prévoir, ils ont privilégié la réponse la plus globale, ils se répartissent également dans les catégories les plus techniques, « augmenter la production », et les catégories les plus économiques, « développement régional et emploi », en accordant de part et d'autre plus de poids aux problèmes économiques.

Tableau VI-3 Objectifs de la croissance économique (question 62)

	ICA	ICF
Créer de nouveaux emplois	11,1	13,0
Augmenter la production	19,4	20,3
Industrialiser la province	47,6	50,7
Développer les régions	21,9	15,9
		non sign.

### *C. La croissance et le monde économique environnant*

Deux séries de problèmes sont abordés ici; les uns concernent l'univers économique extérieur à l'économie québécoise : capitaux, approvisionnements et commerce extérieur; les autres définissent certaines modalités du régime économique lui-même : régime politique, régime juridique des entreprises, institutions économiques, système fiscal.

#### *1. Les sources de capitaux*

La préférence quant à l'origine des capitaux nécessaires au développement du Québec est un premier indice d'orientation vers des valeurs économiques; c'est également un indice du sentiment d'appartenance à tel ou tel univers économique; ce peut être aussi la mesure de craintes exprimées dans le rejet de certaines sources de capitaux. Cette question proposait un premier et un second choix dont nous indiquerons les résultats (tableau n° VI-4).

C'est d'abord au Québec qu'il faut trouver les moyens financiers du développement. Cette préférence s'affirme nettement dans les deux groupes et manifeste une confiance très grande dans les ressources possibles de l'économie québécoise. C'est ensuite à des capitaux canadiens que l'on fait appel, avec cependant, dans les deux cas, plus de fréquence chez les ICA que chez les ICF. Par contre, les

Tableau VI-4 Préférences quant à la source de capitaux (question 58)

	Premier choix		Second choix	
	ICA	ICF	ICA	ICF
Québec	66,8	76,0	20,6	9,6
Canada	28,9	14,4	70,4	63,3
USA	4,3	8,0	7,8	15,9
France	0,0	1,5	0,4	10,0
Angleterre	0,0	0,0	0,8	1,2

deux groupes manifestent peu fréquemment le désir de voir les capitaux américains s'installer au Québec, cette réticence étant néanmoins plus forte chez les ICA que chez les ICF. Enfin, on peut constater que le recours à des capitaux venant d'Angleterre n'est pas mentionné dans le premier choix, et seulement cinq fois (3 ICF et 2 ICA), dans le second choix. En revanche, 4 ICF dans le premier choix et 25 ICF dans le second (plus 1 ICA) feraient appel à des capitaux venant de France. Ici, comme sur d'autres points, le cadre de référence « France » est plus souvent utilisé par les ICF que le cadre « Angleterre » par les ICA.

## 2. L'autarcie et le commerce international

Si le Québec doit tirer surtout de ses propres ressources les capitaux nécessaires à son développement, faut-il privilégier, pour atteindre ce but, une économie plutôt fermée qui s'efforcerait de produire ce dont elle a besoin, ou une économie qui mettrait l'accent sur les échanges internationaux ?

Tableau VI-5 Autarcie ou commerce international (question 61)

	ICA	ICF
Fabriquer pour ses besoins	17,5	47,8
Développer les échanges internationaux	82,5	52,2

$P = 0,001$

Très clairement, ici, une différence apparaît. Alors que 82 % des ICA se prononcent pour un système libre-échangiste, les ICF se partagent en deux groupes pratiquement égaux pour favoriser l'un ou l'autre système. Pour la moitié d'entre eux, s'affirme une volonté d'autonomie économique qui soit la plus complète possible, et l'on a vu que, dans 76 % des cas, c'est par le financement autonome qu'ils

souhaiteraient atteindre cet objectif. Sans doute touche-t-on ici l'une des différences les plus marquées entre les deux groupes comparés.

### *3. La politique tarifaire*

Une politique autarcique nécessite l'établissement de barrières douanières. Les ingénieurs interviewés sont-ils conscients de ce phénomène ou se montrent-ils en retrait de ces mesures protectionnistes ? Autrement dit, les ICF qui, pour moitié, favorisent une politique autarcique, sont-ils conséquents avec leur choix ?

Chez les ICA, le choix reste logique avec l'option libre-échangiste. Par contre, chez les ICF, 73,6 % abandonnent l'un des moyens privilégiés d'une politique autarcique, alors qu'un peu plus d'un quart acceptent une telle politique douanière, préconisant en conséquence d'employer les moyens nécessaires aux fins qu'ils ont choisies.

En résumé, on peut dire que le choix d'une politique d'autonomie économique complète est assez clair et conséquent pour un quart des ICF et reste souhaité par un autre quart, sans qu'on puisse cependant leur prêter une vision assez précise de certaines implications de leur choix.

En ce qui concerne les ICA, bien qu'ils privilégient, comme les ICF, les capitaux québécois, ils s'opposent à eux quant au type de politique économique à suivre,

Tableau VI-6 Faut-il élever ou abaisser les barrières tarifaires ?  
(question 63b)

	ICA	ICF
Élever	10,4	26,4
Abaissier	89,6	73,6
		$P = 0,001$

### *D. La croissance et les mesures économiques internes*

La croissance accélérée et un certain type de politique économique s'accompagnent-ils d'une préférence pour un régime ? Plus directement, quel choix fait-on entre trois modèles : économie libérale et entreprise privée, planification et entreprise publique, système intermédiaire combinant certains apports des deux premiers modèles, appelé régime d'économie mixte ?



### 1. Le régime juridique de l'entreprise

Les profils différents s'accroissent encore ici : alors que les ICA accordent, avec une très forte majorité, leurs suffrages à l'entreprise privée, ce modèle reçoit moins de la moitié de ceux des ICF, qui sont plus nombreux à voir en l'entreprise mixte le régime le plus apte à permettre le type de croissance qui leur semble souhaitable. Seuls 11,8 % des ICF se montrent favorables à l'entreprise publique, mais ce pourcentage est deux fois plus élevé que celui des ICA qui partagent cette opinion. Et si on groupe les partisans de l'entreprise mixte et de l'entreprise publique, en les opposant à ceux de l'entreprise privée, cette dernière, fondement de l'économie libérale, ne reçoit plus chez les ICF que 40 % des préférences. De nouveau, deux conceptions majoritaires de l'économie s'opposent ici inconsciemment.

Tableau VI-7 Statut de l'entreprise favorable à la croissance économique (question 57)

	ICA	ICF
Entreprise privée	78,8	39,9
Entreprise mixte	16,3	48,3
Entreprise publique	4,9	11,8
		$P = 0,001$

### 2. Les institutions privilégiées pour la croissance économique

Ces régimes différents se trouvent en fait concrétisés, dans l'économie du Québec, par des institutions récentes et spectaculaires, inspirées par le gouvernement provincial : les unes procèdent d'une philosophie nettement interventionniste, les autres sont des créations du gouvernement, mais qui visent tout autant à fortifier un capitalisme québécois qu'à assurer un rôle d'initiateur économique au gouvernement. Du premier type relèvent la nationalisation de l'électricité et les projets d'institution de planification; du second, plus directement, la Société générale de financement et l'aciérie. (Au moment de l'enquête, le statut définitif de celle-ci n'était pas encore fixé, mais le premier ministre avait souligné, dans une déclaration, que la majorité de ses capitaux seraient privés.) À ces deux types d'institution avaient été ajoutées les institutions bancaires, auxquelles les interviewés auraient pu faire appel, mais cette catégorie est apparue, par la suite, insuffisamment définie (tableau n° VI-8).

C'est la même tendance qui continue ici à s'affirmer, avec un renforcement des institutions de type public chez les ICF. Il ne faut pas oublier cependant que 35,3 % d'entre eux favorisent l'entreprise privée et un pourcentage presque équivalent d'ICA pensent que ce sont

les institutions de type public qui permettent le plus la croissance économique du Québec. Dans les deux cas, les institutions bancaires sont beaucoup moins souvent prises en considération.

Tableau VI-8 Institutions favorisant le plus la croissance économique (question 56)

	ICA	ICF
Société générale de financement	29,6	18,0
Aciérie	30,3	17,3
	59,9	35,3
Organisme gouvernemental de planification	13,0	30,9
Hydro-Québec	17,6	27,2
	30,6	58,1
Institutions bancaires	9,5	6,6
		P = 0,001

### 3. L'entreprise privée ou la nationalisation (question 63a)

Mais si, dans l'action gouvernementale, les ICF favorisent davantage les institutions à caractère interventionniste, il n'en demeure pas moins que, lorsqu'il leur est proposé de choisir entre l'encouragement à l'entreprise privée et la nationalisation, ils continuent, en grande majorité, à préférer le premier modèle, bien que près de 30 % acceptent l'idée de la nationalisation, qui, chez les ICA, est à peine prise en considération.

On pourrait dire en résumé que, parmi les trois modèles proposés, il est manifeste que les ICA se prononcent pour le premier, celui de l'économie libérale et de l'entreprise privée. Le choix est moins clair chez les ICF qui, dans leur majorité, penchent pour un régime d'entreprise mixte ou publique, acceptant, parmi les institutions d'origine gouvernementale, celle dont le caractère est plus nettement interventionniste, mais qui ne croient pas, en règle générale, à la procédure de nationalisation. C'est donc une intervention gouvernementale, dans des entreprises à caractère mixte, qui semblerait refléter le mieux l'opinion générale. Il n'en reste pas moins que 30 % environ semblent envisager des mesures d'interventionnisme économique plus affirmées.

### E. Les acteurs de la croissance

Cette croissance rapide, dont nous venons de parcourir les modalités, les ingénieurs des deux groupes s'en sentent-ils les bénéficiaires éventuels et quels en seront les promoteurs ?



### 1. Le développement économique du Québec et l'amélioration de la position personnelle

Il est particulièrement intéressant de scruter ici les attitudes des deux groupes. On peut émettre, en effet, l'hypothèse voulant que les ICF se sentent plus favorisés que les ICA par cette croissance, ou encore, que les deux groupes pensent que la croissance se fera, mais non au bénéfice des ingénieurs.

Si le pourcentage des ICA favorisés par le développement de l'économie est inférieur à celui des ICF, il n'en reste pas moins que, dans une très large proportion, ils ont conscience d'être concernés. Certes, ils ne sont pas moins de 30 % à envisager ce développement comme un événement qui se passera sans eux ou contre eux, mais 13,6 % des ICF les rejoignent dans cette conception. Aussi, ce n'est donc pas nécessairement une appréhension à l'égard du Québec qu'expriment les ICA, mais un sentiment de doute, partagé par les ICF, qui leur fait craindre que le développement ne profite en définitive à des groupes sociaux étrangers au leur.

Tableau VI-9 Rapports entre la croissance économique du Québec et la position personnelle (question 28)

Rapport favorable	ICA	ICF
Oui	69,9	86,4
Non	30,1	13,6
		P = 0,001

### 2. La croissance et les groupes professionnels

Il est en effet frappant de constater que les ICA accordent moins d'importance à leur contribution au développement économique du Qué-

Tableau VI-10 Contribution des groupes professionnels à la croissance économique (question 55)

	ICA	ICF
Industriels	36,5	29,7
Ministres provinciaux	22,2	24,3
Hauts fonctionnaires	14,9	7,6
Propriétaires de grandes entreprises commerciales	11,8	11,6
Professions libérales	6,6	2,2
Ingénieurs	5,9	17,4
Savants et chercheurs	1,7	6,5
Ministres fédéraux	0,3	0,7

bec qu'ils n'en accordent à d'autres groupes et que les ICF ne s'en accordent à eux-mêmes.

Les ICF s'accordent à eux-mêmes trois fois plus d'importance dans ce développement économique que les ICA, plaçant les ingénieurs en troisième position, après les industriels et les ministres provinciaux, catégories que les ICA ont également placées en tête.

On peut remarquer, de plus, qu'à l'importance très grande accordée à la fonction politique — presque aussi grande, en ce qui concerne les ICF, que celle accordée à la fonction de l'industriel — correspond une évaluation à peu près nulle du rôle des ministres fédéraux dans le développement économique du Québec.

Il faut en outre souligner que les ICA accordent plus d'importance aux hauts fonctionnaires et aux professions libérales que les ICF.

### *3. Les classes sociales et la croissance économique*

Enfin, quelle importance accorde-t-on aux classes sociales dans cette croissance économique du Québec ?

La caractéristique dominante de ce résultat est l'importance de la classe moyenne chez les ICA et la répartition presque égale entre trois classes chez les ICF.

Il faudrait, bien entendu, délimiter plus nettement le contenu de chacune des catégories, mais on a vu qu'en termes d'occupation correspondant aux niveaux égaux, inférieur ou supérieur, les ICA ont tendance à se situer plus souvent que les ICF au niveau des classes moyennes. C'est-à-dire que les ICA placent en fait les membres des professions libérales au-dessus d'eux.

Tableau VI-11 Contribution des classes sociales à la croissance économique (question 66)

	ICA	ICF
Bourgeoisie ( <i>upper</i> )	23,0	36,1
Classe moyenne	59,9	31,8
Classe ouvrière	14,9	30,3
Classe agricole	2,1	1,8
		$P = 0,001$

Si les professions représentées sous chacune des trois catégories s'avèrent effectivement semblables, c'est une contribution très réduite qui est accordée dès lors à la classe ouvrière par les ICA si on la compare à celle que lui accordent les ICF. Il en va de même, bien qu'à moindre degré, de l'importance accordée à la classe supérieure.

*Conclusion*

Le test d'information économique a manifesté un niveau élevé d'information, sensiblement égal dans les deux groupes. C'est dans une optique de développement accéléré qu'ils se situent l'un et l'autre pour juger du devenir du Québec; ils souhaitent que cette croissance se fasse surtout à l'aide de capitaux québécois — et il convient de noter sur ce point l'accord des deux groupes — plaçant les capitaux canadiens en seconde position et manifestant une très grande réserve à l'endroit des capitaux venant de l'extérieur. Cependant, il y a divergence quant à la politique à suivre; plus autarciques que leurs collègues canadiens-anglais, la majorité des ICF n'acceptent cependant pas l'une des conséquences de cette politique : les barrières tarifaires.

L'opposition entre les deux groupes s'affirme encore au niveau de la préférence accordée aux régimes économiques, les ICA se prononçant nettement en faveur de l'entreprise privée et les ICF en faveur de l'entreprise mixte ou publique. Il en est de même quant au choix des institutions particulières; les réserves étant grandes chez les ICF à l'égard des nationalisations, on peut dire que ce sont des systèmes mixtes qui reçoivent le plus fréquemment leurs suffrages.

Si les deux groupes se voient bénéficier des avantages du développement, ce sentiment est toutefois plus fort chez les ICF. Il s'explique sans doute par une conscience de participation et de responsabilité économique plus grande : en effet, si on demande aux ingénieurs d'apprécier, comparativement à d'autres groupes, leur contribution à l'économie, les ICA la situent au sixième rang alors que les ICF la placent au troisième. En termes de classes, la différence est encore plus significative : les ICA octroient de l'importance à la classe moyenne, principalement à la bourgeoisie, alors que les ICF estiment que la contribution des classes ouvrières est égale à celle des autres.

Ces orientations différentes peuvent être attribuées en partie à une origine ouvrière plus fréquente chez les ICF, mais elles traduisent aussi l'absence d'une bourgeoisie industrielle canadienne-française et une volonté de compensation par des solutions collectives.



*A. La structure de la population*

Un premier résultat pose le problème des classes professionnelles et sociales dans le cadre de structures nettement différentes. Quelle est la composition de la société du Québec ? Autrement dit, à quel stade d'industrialisation en est-elle ?

Tableau VII-1 Pourcentage estimé du secteur agricole dans la main-d'oeuvre totale au Québec (question 67)

Pourcentage estimé	ICA	ICF
0 à 9 %	4,8	11,5
10 à 19 %	18,5	32,1
20 à 29 %	33,7	34,7
30 à 39 %	21,5	13,7
40 % et plus	21,4	8,0

Les deux groupes surestiment la part de la main-d'oeuvre agricole, traçant ainsi, pour les ICA surtout, une image très ancienne de la société québécoise. En effet, en 1965, le pourcentage de cette main-d'oeuvre ne dépassait pas 7 % au Québec. Le tableau VII-2 indique quelle en était la répartition effective de 1911 à 1961.

En comparant la situation réelle et l'évaluation qu'en donnent les ingénieurs, on constate qu'environ 42 % des ICA et 22 % des ICF ont des perceptions qui accusent un retard de 50 années ou plus, leurs évaluations ne s'avérant valables que pour les années antérieures à 1911.

Tableau VII-2 Pourcentage réel du secteur agricole dans la main-d'oeuvre totale au Québec, de 1911 à 1961

1911	31,5
1921	27,6
1931	21,9
1941	21,1
1951	13,1
1961	7,5

Source : Recensement du Canada de 1961, catalogue 94-501.

### *B. Les classes sociales*

La question posée demandait aux ingénieurs de décrire les catégories de personnes qu'ils estimaient appartenir à une classe supérieure, égale ou inférieure à la leur.

Tableau VII-3 Catégories professionnelles perçues par l'interviewé comme ayant un statut supérieur à la sienne (question 64c)

Fonctions	ICA	ICF
Professionnelles	16,0	28,3
Économiques	26,9	31,1
Administratives	26,9	8,4
Politiques	12,7	16,3
Intellectuelles	12,7	12,7
Religieuses	1,9	2,8
Autres	2,8	0,4

ftp

Si, pour les ICA comme pour les ICF, l'occupation de ceux qu'ils situent dans une classe supérieure est définie par leurs fonctions économiques, les ICA estiment en plus grand nombre que cette classe comprend surtout des personnes assumant des fonctions administratives (haut fonctionnaire, gérant, administrateur, exécutif), alors que les ICF y rangent plutôt les professionnels.

Les ICA se définiraient plus généralement par leur appartenance à une classe moyenne, ce qui peut s'expliquer par leur participation à une société globale où les catégories supérieures sont plus nombreuses. En revanche, les ICF qui, plus souvent que les ICA, ont placé les professionnels dans la classe supérieure, tendent, dans la deuxième question, à se situer plus fréquemment à leur niveau.



Tableau VII-4 Catégories professionnelles perçues par l'interviewé comme ayant un statut égal à la sienne (question 64a)

	ICA	ICF
Tous des professionnels	35,9	55,3
Un semi-professionnel et 2 professionnels	37,5	28,2
Majorité de semi-professionnels ou plus bas	26,6	16,6
		$P = 0,001$

Tableau VII-5 Catégories professionnelles perçues par l'interviewé comme ayant un statut inférieur à la sienne (question 64b)

	ICA	ICF
Majorité d'ouvriers spécialisés ou non	59,8	28,4
Cols blancs et minorité d'ouvriers	33,3	49,4
Minorité de cols blancs et majorité de « plus élevés que cols blancs »	3,9	19,0
Autres	3,0	3,2
		ftp

On obtient ici un résultat inverse du précédent. En effet, ce sont les ICA qui perçoivent le groupe qui leur est inférieur comme composé surtout d'ouvriers, les ICF tendant à définir davantage le groupe inférieur comme étant composé de cols blancs. Ce qui pourrait se résumer ainsi : les ICA se perçoivent plus souvent dans une classe moyenne assez étendue, dont la classe ouvrière se trouve plus éloignée, alors que les ICF écartent beaucoup plus nettement de leur milieu les cols blancs, sans souligner la distance qui les sépare des ouvriers.

### *C. Les groupes ayant des intérêts opposés*

Les résultats précédents ont montré chez les ICA l'image d'une société dont les extrémités, administrateurs d'une part et ouvriers de l'autre, sont plus éloignées. Cette société est-elle pour autant formée de groupes qui s'opposent et jusqu'à quel point ?

Il est difficile de situer le cadre de référence de chacun des deux groupes d'ingénieurs. Se réfèrent-ils à leur propre milieu ethnique, aux deux à la fois, français et anglais, ou tantôt à l'un tantôt à l'autre. La question était formulée en termes généraux afin d'amener la question suivante qui demandait de qualifier ces groupes d'individus ayant des intérêts opposés à ceux des ingénieurs.

Tableau VII-6 Perception de groupes ayant des intérêts opposés à ceux de l'interviewé (question 65a)

	ICA	ICF
De tels groupes existent	83,2	57,1
De tels groupes n'existent pas	16,8	42,9
$P = 0,001$		

Les réponses n'étaient pas fermées; elles laissaient donc à l'interviewé le choix de termes qui ont été regroupés ensuite selon six types de qualification des oppositions :

type idéologique (socialistes, planificateurs, créditistes, radicaux, séparatistes, etc.)

type professionnel (architectes, avocats, médecins, savants, etc.)

type politique (les Anglais, les Français, les autres nations, les agents ennemis, etc.)

type sociaux dirigeants (employeurs, patrons)

type sociaux dirigés (employés, salariés, syndicats).

Tableau VII-7 Catégories de groupes perçus par l'interviewé comme ayant des intérêts opposés aux siens (question 65b)

	ICA	ICF
Idéologique	57,8	20,0
Professionnel	15,1	25,2
Politique	0,6	11,3
Sociaux dirigeants	3,4	29,6
Sociaux dirigés	24,1	13,9
$P = 0,001$		

Les pourcentages de ce tableau ont été calculés à partir de 293 réponses, 115 chez les ICF et 178 chez les ICA, les autres ingénieurs interviewés, soit 323, n'ayant pas pu ou voulu qualifier les oppositions perçues. Le résultat le plus frappant se présente chez les ICA, qui perçoivent très fortement les oppositions en termes idéologiques, alors que ce type de qualification est relativement faible chez les ICF, le groupe venant en seconde position étant celui des sociaux dirigés (ouvriers salariés, employés et chefs syndicaux). Quant aux ICF, les groupes opposés auxquels ils accordent le plus d'importance sont les sociaux dirigeants (employeurs, patrons) et les professionnels (avocats, médecins, etc.).

Une autre question, plus structurée, permet de reconstituer des modèles d'opposition dans la conscience sociale des ingénieurs. Sans

pour autant porter des jugements de valeur, les répondants devaient choisir entre deux formes d'opposition sociale celle qui leur apparaissait la plus importante.

Tableau VII-8 Types d'opposition sociale perçus — choix structuré (question 49)

Question 49a	ICA	ICF
Ceux qui ont de la volonté/ceux qui n'en ont pas	54,6	56,3
Riches/pauvres	45,4	43,7
	non sign.	
Question 49b		
Exploiteurs/exploités	33,0	51,8
Gens honnêtes /gens malhonnêtes	67,0	48,2
	$P = 0,001$	
Question 49c		
Capitalistes/prolétaires	9,1	31,3
Ceux qui ont de l'instruction/ceux qui n'en ont pas	90,9	68,7
	$P = 0,001$	
Question 49d		
Jeunes/vieux	39,1	40,2
Manuels/non-manuels	60,9	59,8
	non sign.	
Question 49e		
Anglophones/francophones	33,8	56,4
Gens de la ville/gens de la campagne	66,2	43,6
	$P = 0,001$	

Sur deux des cinq indices proposés, on n'observe aucune différence significative entre ICA et ICF, lesquels accordent légèrement plus d'importance à des oppositions de type moral (ceux qui ont de la volonté — ou non) qu'à des oppositions de type social (riches/pauvres).

De même, le conflit professionnel (manuels/non-manuels) est jugé sensiblement plus important que celui des générations (jeunes/vieux).

Par contre, les ICF accordent plus d'importance aux oppositions anglophones/francophones, capitalistes/prolétaires et exploités/exploités. Les ICA choisissent plus massivement les oppositions ville/campagne, instruits/non instruits, honnêtes/malhonnêtes.

Ces réponses étant partiellement orientées par la structure du questionnaire, les répondants restaient libres de choisir ensuite dans l'ensemble des oppositions celles qu'ils jugeaient les plus importantes. Cette présentation moins structurée renforce la valeur de leur option.

Tableau VII-9 Types d'opposition sociale perçus — choix sur l'ensemble (question 50)

	ICA	ICF
Ceux qui ont de la volonté/ceux qui n'en ont pas	7,9	16,2
Gens de la ville/gens de la campagne	10,3	8,7
Anglophones/francophones	5,2	20,9
Manuels/non-manuels	4,8	6,9
Riches/pauvres	14,5	9,0
Jeunes/vieux	1,7	1,4
Exploités/exploités	2,1	6,5
Capitalistes/prolétaires	2,8	4,0
Gens honnêtes/gens malhonnêtes	15,9	9,0
Ceux qui ont de l'instruction/ceux qui n'en ont pas	34,8	17,3
		ftp

Les ICF sont d'abord sensibles aux oppositions ethniques, puis aux clivages dus à l'instruction et au volontarisme des individus, les ICA accordant pour leur part peu d'importance aux oppositions ethniques, mais beaucoup à l'instruction, au critère moral d'honnêteté ainsi qu'à la division entre riches et pauvres.

ICA et ICF mettent donc l'accent sur l'image d'une société où l'instruction joue un rôle de premier plan, mais les ICF ont davantage conscience des barrières ethniques ou linguistiques et de l'effort personnel de volonté qu'ils doivent consentir alors que les ICA insistent plutôt sur les « règles du jeu » (honnêteté) d'une division sociale basée sur l'instruction.

Enfin, une dernière question s'efforçait de tester la vision et l'estimation globale que l'on se fait des écarts sociaux. L'indice le plus commode est celui des écarts de salaire.

Tableau VII-10 Ouverture ou fermeture de l'éventail des salaires -- jugement de réalité (question 83a)

	ICA	ICF
L'éventail s'élargit	10,0	36,7
L'éventail se ferme	82,2	59,0
On ne sait pas	7,8	4,3

Les deux groupes s'accordent dans leur majorité pour constater que les écarts de salaire dans la société tendent à diminuer, mais cette constatation est beaucoup plus générale chez les ICA, 36 % des ICF jugeant que l'échelle des salaires a tendance à s'allonger. Cette ouverture ou cette fermeture de l'éventail des salaires, comment la juge-t-on ?

Tableau VII-11 Ouverture ou fermeture de l'éventail des salaires -- jugement de valeur (question 83b)

	ICA	ICF
Structure plus large bonne	5,2	22,5
Structure plus fermée mauvaise	15,6	13,5
Structure plus large mauvaise	4,5	12,4
Structure plus fermée bonne	64,2	44,0
Structure plus large : pas d'opinion	0,3	1,8
Structure plus fermée : pas d'opinion	2,4	1,5
Total plus égalitaire	68,7	56,4
Total plus libéral	20,8	36,0
Total non réponse ou sans opinion	10,5	7,6

Les ICA comme les ICF favorisent une structure plus égalitaire, mais les ICA dans une plus grande proportion. En outre, alors que les ICF ne manifestent pas d'écart entre leur jugement de réalité et leur jugement de valeur, on constate une plus grande tension chez les ICA, plus nombreux à croire en un élargissement de l'éventail des salaires qu'à porter un jugement favorable sur cet élargissement.

#### *D. La dynamique sociale*

##### *1. La contribution des classes*

Les ICA manifestent la perception d'écarts sociaux plus grands entre les groupes sociaux extrêmes, se situant eux-mêmes plus fréquemment dans la classe moyenne que dans la classe supérieure. Mais quel



rôle attribue-t-on aux classes dans la croissance économique du Québec ?

Tableau VII-12 Participation des classes sociales à la croissance économique du Québec (question 66)

	ICA	ICF
Bourgeoisie ( <i>upper</i> )	23,0	36,1
Classe moyenne	59,9	31,8
Classe ouvrière	14,9	30,3
Classe agricole	2,1	1,8
$P = 0,001$		

Les ICF attribuent une contribution d'égale importance aux classes ouvrière, bourgeoise et moyenne. Chez les ICA, la distribution établit une hiérarchie très nette en importance, la plus grande revenant à la classe moyenne, la plus faible, aux classes ouvrière et agricole.

Peut-être conviendrait-il de rapprocher ce résultat de la surestimation, constatée précédemment, de la classe agricole par les ICA, et de noter aussi que l'éloignement des extrêmes, constaté également plus haut chez eux, s'accompagne d'une minimisation du rôle de la classe ouvrière et de la bourgeoisie.

## 2. Les grèves

Les ICF, qui ont accordé une importance plus grande au rôle joué dans l'économie par la classe ouvrière et la bourgeoisie, définissent-ils aussi une zone d'affinités plus grande avec ces groupes ? Les ICA, en sens inverse, en resteraient-ils plus éloignés ? C'est ce qu'une question s'efforçait de vérifier. Elle supposait une situation de grève et demandait à chacun d'indiquer s'il se sentait impliqué avec le groupe ouvrier, avec le groupe des employeurs, ou pas impliqué du tout.

Tableau VII-13 Implication dans les grèves (question 68)

Identification	ICA	ICF
Avec les employeurs	54,3	37,0
Avec les ouvriers	15,6	28,0
Pas du tout	30,0	35,0
$P = 0,001$		



Les ICA se sentent en majorité du côté des employeurs, alors que le tiers gardent une position de neutralité et 15 % se sentent plus près des ouvriers. Si le pourcentage des neutres est presque semblable chez les ICF, l'écart entre employeurs et ouvriers est nettement plus réduit, près du tiers se sentant plus près des ouvriers.

### 3. Le syndicalisme des ingénieurs

Cette affinité, plus marquée chez certains ICF, avec l'une des actions propre au syndicalisme ouvrier, est-elle l'indice d'une acceptation plus grande du syndicalisme par et pour les ingénieurs eux-mêmes ?

Tableau VII-14 Attitude à l'égard du syndicalisme des ingénieurs (question 52a)

Attitude	ICA	ICF
Favorable	12,9	58,3
Défavorable	87,1	41,7

$P = 0,001$

La différence entre les deux groupes est sur ce point très nettement significative. Alors que les ICA ne se montrent favorables au syndicalisme que dans une faible proportion, les ICF lui sont en grande majorité acquis.

La structure de l'emploi dans les secteurs industriels ou les services publics explique en partie ce phénomène. Il n'en reste pas moins que la résistance à la syndicalisation aurait pu se manifester avec autant de force dans les deux groupes, l'un et l'autre percevaient de la même façon leur statut professionnel et leur rôle au sein de la société; mais tel n'est effectivement pas le cas, si l'on considère les motifs de cette option.

C'est le même motif qui, parmi ceux qui sont invoqués, domine très nettement dans les deux groupes : contre la syndicalisation, la défense du statut professionnel au nom de la promotion individuelle et de l'initiative; pour la syndicalisation, un ensemble d'arguments touchant à la revalorisation de la profession d'ingénieur. Dans le premier cas, on s'oppose à la syndicalisation pour défendre des droits, dans le second, on adhère à l'action syndicale pour conquérir des droits dont on a conscience d'être privé\*.

---

\* Cette hypothèse est analysée très longuement et en profondeur dans une étude d'André Saint-Amand, intitulée « Le mouvement syndical chez les ingénieurs », dans *Sociologie et société*, vol. 4, 1970.

Tableau VII-15 Motifs de l'attitude à l'égard du syndicalisme (question 52b)

	ICA	ICF
<i>Motifs de l'opposition</i>		
Antiprofessionnel, opposé à l'initiative individuelle	80,9	82,6
Affiliation à une centrale syndicale, ingérence extérieure	7,0	10,9
Barrière à l'avancement	8,4	5,5
Inutile	3,7	0,9
<i>Motifs de l'attitude favorable</i>		
Inutilité de la Corporation	3,1	9,1
Revalorisation de la profession	6,3	14,3
Amélioration des conditions de travail, opposition à l'exploitation	25,0	31,8
Nécessité dans les grandes entreprises	21,9	22,1
Efficacité de l'action collective	34,4	18,2
Droit fondamental	9,4	4,5

### *Conclusion*

La structure sociale de la société perçue par les ingénieurs est celle d'un passé récent ou lointain. Pour 42 % des ICA, c'est une structure vieille de 50 ans qui leur est présente à l'esprit, et ce phénomène de retard se retrouve chez 22 % des ICF. Autrement dit, le Québec est considéré très souvent par les ingénieurs comme étant beaucoup plus rural ou agricole qu'il ne l'est en réalité.

Accordant plus d'importance aux professionnels dans cette structure sociale, les ICF orientent leur propre réseau d'interaction sociale vers le groupe des professionnels, alors que les ICA orienteraient plus largement le leur vers les classes moyennes. De même, les ICA perçoivent plus d'écart entre eux et les ouvriers, alors que les ICF marquent des distances à l'égard des cols blancs.

Ces affinités et ces distances se retrouvent sans doute parmi les 24,1 % d'ICA qui perçoivent le monde des ouvriers, des employés, des syndicalistes, comme des groupes qui les menacent et sont souvent liés aux communautés idéologiques les plus redoutées. Chez les ICF, au contraire, ce sont les groupes des professionnels et des dirigeants sociaux qui sont définis comme groupes opposés. Notons toutefois que cette perception de groupes ayant des intérêts opposés est beaucoup plus faible chez les ICF que chez les ICA.

Cette hypothèse semble cohérente si l'on considère que les ICF accordent plus d'importance à la classe ouvrière dans la croissance

économique. De même, ils sont plus nombreux à se sentir du côté des ouvriers en cas de grève, et c'est finalement par une forte majorité (58,3 %) qu'ils se prononcent en faveur de la syndicalisation des ingénieurs alors que les ICA n'y adhèrent que dans une faible proportion (12,9 %).

L'ensemble de ces résultats permet donc de considérer que les ICA, s'affiliant plus souvent à une classe moyenne largement définie, présentent, en termes de perception de classe, les traits d'un groupe minoritaire qui se sent menacé par des groupes sociaux inférieurs ou à tendance idéologique. Les ICF, au contraire, participeraient d'autant plus facilement à l'action du syndicalisme que, sur plusieurs points, ils valorisent l'apport des milieux ouvriers et manifestent plus d'affinités avec leur situation.

En résumé, on peut dire que les ICF, s'identifiant dans leur majorité plus fortement aux professionnels, ne perdent pas leurs affinités avec le groupe ouvrier et adoptent certains de ses modes et de ses objectifs de revendication, et que les ICA, trouvant pour leur part davantage leur identification dans une classe moyenne, se montrent très réticents à l'égard de ces mêmes thèmes et méthodes de revendication.



L'hypothèse de départ du chapitre des valeurs se fonde sur une typologie de valeurs établie selon les stades de développement de la société industrielle. Trois stades seraient schématiquement proposés. Au premier, celui de la société préindustrielle, dominent les valeurs traditionnelles, celles où grande famille et travail se confondent encore, où l'autorité paternelle et familiale reste forte, où l'argent est épargné et investi dans des biens immobiliers.

Au second stade, ce sont les valeurs de l'entreprise qui dominent, avec l'évolution historique d'un commandement autoritaire vers un commandement plus démocratique, d'une hiérarchisation rigide vers une hiérarchisation plus souple, où l'accent est mis sur les qualités de producteur puis, progressivement, sur celles d'organisateur.

Au troisième, enfin, nous voyons se dessiner deux mouvements caractéristiques : d'une part, la société industrielle avancée déplace l'accent des valeurs du travail vers celles de la vie privée, de l'épargne vers la consommation, de la grande famille vers une famille plus réduite, avec démocratisation des rapports et l'acceptation, par les hommes et par les femmes, du partage des rôles sociaux; d'autre part, on tend à transférer un certain nombre de responsabilités économiques au pouvoir politique, avec intervention de l'État et établissement d'une économie mixte; ici des valeurs nouvelles apparaîtraient, privilégiant les valeurs politiques et scientifiques.

Le schéma proposé est plus un cadre d'hypothèse qu'un modèle systématique et déjà démontré. Il découle cependant d'un certain accord entre les sociologues de la société industrielle. Sous-jacente à ce schéma, se trouve aussi l'hypothèse wéberienne de l'esprit du capitalisme propre aux protestants puritains. Mais ici les hypothèses offrent un certain paradoxe. Si ce que Weber décrit comme une éthique puritaine correspond à l'ensemble des traits caractéristiques d'une population qui met en marche la société industrielle, on pourrait s'attendre à trouver chez les ICF qui veulent créer un

capitalisme québécois certaines des attitudes de l'entrepreneur, pas très éloignées cependant des valeurs de la société traditionnelle, et chez les ICA, au contraire, les traits d'une population qui a réalisé l'industrialisation et qui participe d'une façon plus avancée aux valeurs de la société de consommation.

Mais l'éthique puritaine a marqué la société anglo-saxonne, aussi s'attendrait-on plutôt à en retrouver, chez les Canadiens anglais, les traits sinon des traces nettement imprimées.

Enfin, un dernier modèle pourrait apparaître, celui d'une société homogène, profondément industrialisée, à laquelle participent les deux groupes. Dans ce cas, les valeurs traditionnelles ont disparu depuis longtemps, celles de la première phase de la société industrielle s'estompant déjà pour laisser la place aux valeurs de la société de consommation où les distinctions présentes à l'origine ne sont plus que les ornements de la mémoire collective.

#### *A. La vie privée et la carrière*

Deux hypothèses se présentent ici : l'une affirme qu'un certain comportement rationalisateur tend à privilégier les activités de travail par opposition à la vie privée; l'autre suggère que l'accent mis sur la privatisation est le signe de la participation à une société industrielle avancée. Ces deux hypothèses nous renvoient, la première à l'éthique puritaine dont le foyer se trouvait, selon Max Weber, chez les protestants puritains, la seconde aux groupes sociaux les plus avancés dans la voie de la participation à la société industrielle moderne.

Si donc on se place sur un continuum de rationalisation de la vie privée en fonction de la vie de travail, ce sont les ICF, plus récemment entrés dans la société industrielle, qui valoriseraient le travail au détriment de la vie privée. Si, au contraire, on se place sur le continuum participation à la vie industrielle, ce sont les ICA qui valoriseraient le plus la vie privée. Bien entendu, il s'agit de modèles qui, dans la réalité, se compèntrent; il convient donc de discerner des tendances.

On a vu que les ICA, plus souvent que les ICF, acceptaient d'augmenter le nombre d'heures de travail pour obtenir une promotion. Si les deux groupes valorisent plus la vie de famille que le travail ou les revenus, un écart apparaît cependant en faveur de la famille chez les Canadiens anglais et en faveur du travail chez les Canadiens français (tableau n° VIII-1). Cet écart s'éclaire si l'on compare les catégories d'âge (tableau n° VIII-2).



Tableau VIII-1 Ce qui compte le plus dans la vie (question 71)

	ICA	ICF
Famille	78,5	64,6
Travail	15,9	24,9
Revenus	1,7	5,4
Culture	1,7	4,0

Tableau VIII-2 Ce qui compte le plus dans la vie — répartition par âge

	ICA		ICF	
	Vieux	Jeunes	Vieux	Jeunes
Famille	80,1	77,1	57,1	67,5
Travail	16,2	15,7	31,2	22,5
Revenus	2,2	1,3	6,5	5,0
Culture	0,7	2,6	5,2	3,5

Ce sont les ICA qui, dans une proportion très élevée, mettent l'accent sur la famille, et les plus âgés des ICF qui mettent l'accent sur le travail. Mais ces hypothèses ne sont pas appuyées par les attitudes à l'égard des loisirs; les deux groupes, assez proches l'un de l'autre, partagent une conception du loisir définie, pour la majorité, comme préparation au travail (tableau n° VIII-3). Nos hypothèses sont même légèrement infirmées si l'on considère la durée des vacances souhaitées (tableau n° VIII-4). Par contre, le privilège plus grand accordé par les ICA à la famille correspond au type souhaité quant à sa dimension (tableau n° VIII-5).

Tableau VIII-3 But des loisirs (question 86)

But des loisirs	ICA	ICF
Se divertir	36,7	42,0
Travailler plus	63,3	58,0

non sign.

Tableau VIII-4 Durée souhaitée des vacances (question 85)

	ICA	ICF
2 semaines	6,9	10,2
3 semaines	68,8	53,5
1 mois et plus	24,4	36,5

Tableau VIII-5 Nombre idéal d'enfants (question 92a)

	ICA	ICF
0-1-2 enfants	12,6	4,4
3-4	81,3	76,1
5-6	6,1	19,5

$P = 0,001$

Bien que les deux groupes s'accordent pour souhaiter, dans leur majorité, des familles de 3 ou 4 enfants, ce sont les ICF qui désirent les familles les plus nombreuses, et les ICA, les familles les moins nombreuses. C'est donc chez les ICA que se retrouve le plus nettement le modèle familial qui est celui d'une société industrielle avancée, si ce modèle est caractérisé par un intérêt plus grand pour la famille que pour le travail, l'inverse étant la caractéristique d'une société industrielle en voie de développement. Mais, à la différence des sociétés préindustrielles, où l'intérêt pour la famille dominait lui aussi, ce n'est plus une famille très étendue, mais une famille assez réduite qui reçoit la faveur des membres de la société industrielle la plus avancée. Les deux groupes participent donc aux mêmes valeurs de rationalisation, parmi lesquelles la planification des naissances (tableau n° VIII-6). Mais là encore les objectifs diffèrent : le nombre d'enfants que l'on veut avoir n'est pas le même (tableau n° VIII-7).

Tableau VIII-6 Attitudes à l'égard de la planification des naissances (question 92b)

	ICA	ICF
Pour la planification	90,2	83,0

$P = 0,01$

Tableau VIII-7 Nombre idéal d'enfants — répartition par âge

	ICA		ICF	
	Vieux	Jeunes	Vieux	Jeunes
3 enfants ou moins	61,0	52,3	34,2	27,6
4 enfants et plus	39,0	47,7	65,8	72,4

Ce sont les ICF, qu'ils soient jeunes ou vieux, qui désirent le plus d'enfants, mais, dans chaque groupe ethnique, ce sont les jeunes qui en désirent le moins. Les jeunes ICF, enfin, restent beaucoup plus proches, dans leurs aspirations, de leurs collègues plus âgés que des ICA, jeunes ou vieux.

Cependant, si l'on isole les ICA catholiques et, parmi eux, ceux qui ont déclaré (question 97c) pratiquer très régulièrement, le taux d'aspiration de ces derniers est le même que celui des ICF (4 enfants et plus : catholiques francophones, 71,9 %; catholiques anglophones, 72,5 %). Notons que chez les ICA protestants le taux de pratique n'exerce pas d'influence sur le nombre d'enfants souhaités.

Indiquons, enfin, qu'il n'y a pas de différence entre les deux groupes, quant à l'âge auquel on estime devoir cesser toute activité professionnelle, 53,3 % des ICA et 56,8 % des ICF estimant qu'il est souhaitable de continuer à travailler après 60 ans (question 78).

Tableau VIII-8 Attitude à l'égard de l'absence de travail (questions 37a et 37b)

Seriez-vous heureux sans travail ?	ICA	ICF
Oui	7,2	8,3
Non	92,8	91,7

Si cela vous rendait malheureux, pourquoi ?

Crainte de l'ennui	58,0	33,2
Besoin de créer	35,3	47,8
Le travail est un devoir	6,7	19,0

$P = 0,001$

Si le travail considéré comme une obligation est le propre d'un groupe plus sensible aux nécessités qu'impose le démarrage dans la société industrielle, on ne peut pas dire que ce trait soit dominant dans l'un ou l'autre groupe, car ICF et ICA valorisent à peu près

pareillement le travail quand on l'oppose à l'oisiveté, bien que pour des motifs assez différents : les ICA mettent en effet l'accent sur la crainte de l'ennui, alors que les ICF voient là davantage le moyen d'exprimer leur créativité. Le thème du devoir, placé en dernier par les deux groupes, revêt incontestablement plus d'importance pour les ICF (tableau n° VIII-8).

### B. L'entreprise

Rappelons les caractéristiques des entreprises dans lesquelles travaille la population étudiée. Les types principaux d'entreprises et la répartition des deux groupes apparaissent dans le tableau n° VIII-9.

Tableau VIII-9 Type d'entreprise où travaillent les ingénieurs (question 9a)

	ICA	ICF
Grande entreprise	70,0	26,0
Petite entreprise	13,8	10,8
Services publics	8,5	33,2
Bureaux d'ingénieurs-conseils	6,2	21,3
Enseignement	2,4	7,6

Par ailleurs, lorsqu'il s'agit de conseiller un jeune ingénieur dans le choix de l'un de ces types d'entreprise, un glissement s'opère dans la distribution par rapport au tableau précédent. Dans les deux groupes, les grandes entreprises, privées pour les ICA, publiques pour les ICF, tendent cette fois à être choisies moins souvent. En sens inverse, la petite entreprise obtient une plus grande faveur, ainsi que les bureaux d'ingénieurs-conseils.

Tableau VIII-10 Type d'entreprise que l'on conseillerait à un jeune ingénieur (question 29a)

	ICA	ICF
Grande entreprise privée	52,4	31,0
Services publics	5,6	6,6
Petite entreprise	30,2	31,8
Bureau d'ingénieurs-conseils	11,9	30,6

$P = 0,001$

La désaffectation des ICF pour la grande entreprise, et plus particulièrement pour les services publics, peut s'interpréter de deux façons : soit qu'elle relève d'une insatisfaction bureaucratique causée par la grande organisation, soit que l'on considère la petite entreprise ou les bureaux d'ingénieurs-conseils plus appropriés à l'apprentissage du jeune ingénieur. Ces deux hypothèses semblent confirmées, du reste, par les motifs invoqués, s'agissant des conseils donnés à un jeune ingénieur : travail créateur et expérience sont en effet les deux facteurs les plus souvent mentionnés.

Tableau VIII-11 Motif du choix proposé au jeune ingénieur (question 29b)

	ICA	ICF
Travail créateur et exigeant	27,5	25,3
Atmosphère de travail	3,8	3,1
Avancement — salaire	4,2	10,1
Expérience	63,4	56,8
Sécurité d'emploi et fonds de pension	0,4	2,3
Partir à son compte	1,8	2,3

La majorité des ICF et la moitié des ICA préfèrent la petite à la grande entreprise (tableau n° VIII-12). Ceci s'explique souvent dans les deux groupes en termes de possibilité de promotion : dans une proportion, cette fois exactement semblable, les deux groupes valorisent peu la grande entreprise comme champ de leur carrière (tableau n° VIII-13).

Tableau VIII-12 Type d'entreprise favorisant la réalisation de ses propres possibilités (question 44)

	ICA	ICF
Grande entreprise	47,3	38,7
Petite entreprise	52,7	61,3
		non sign.

Tableau VIII-13 Poste préféré selon la dimension de l'entreprise (question 36)

	ICA	ICF
Être à la tête d'une entreprise moyenne	70,4	70,3
Cadre supérieur dans la grande entreprise	29,6	29,7
		non sign.

ICA et ICF de Montréal manifestent une même conscience d'appartenir à un système industriel de niveau technique et organisationnel élevé. Si, en effet, l'accent est mis sur la production dans les situations industrielles où domine le secteur primaire ou un secteur de transformation ancien, c'est plus souvent en termes d'organisation qu'est décrite l'industrie dans sa phase ultérieure (tableau n° VIII-14). Cette tendance des ingénieurs à privilégier une vision organisationnelle reflète bien leur proximité d'une situation industrielle avancée dominante, qui est le propre de l'industrie montréalaise.

Tableau VIII-14 Conception de la direction d'entreprise (question 36)

Qualité requise	ICA	ICF
L'art de produire	8,4	3,7
L'art d'organiser	91,6	96,3

Au reste, quel que soit le groupe ethnique auquel appartiennent les ingénieurs, les connaissances auxquelles fait appel leur travail sont loin de se limiter à leur formation professionnelle spécifique (tableau n° VIII-15). Si on les interroge sur le type de formation qui convient le mieux à un directeur général, c'est celle d'administrateur qui, pour les ICA comme pour les ICF, est préférée à celle d'économiste ou d'ingénieur (tableau n° VIII-16). D'ailleurs, les qualités reconnues chez un bon chef sont du même ordre dans les deux groupes (tableau n° VIII-17). Il en est de même concernant la prise en considération de la vie privée d'un ingénieur, que les deux groupes s'accordent à préconiser lorsqu'il s'agit de décider de sa promotion (tableau n° VIII-18).

Tableau VIII-15 Taux d'utilisation des connaissances en génie (question 9c)

	ICA	ICF
0 à 8,9 %	3,8	2,9
9 à 39,9 %	30,7	22,4
40 à 84,9 %	50,7	51,6
85 à 100 %	14,9	23,1

Le résultat important, quant aux questions touchant à la vision de l'entreprise, est la grande similitude des réponses que donnent les deux groupes. Leur cadre de référence est bien plus celui d'une vie de travail et d'un groupe professionnel commun que celui de groupes ethniques différents.



Tableau VIII-16 Type de formation optimale du directeur d'entreprise (question 22)

	ICA	ICF
Économiste	5,2	4,6
Ingénieur	38,2	35,5
Administrateur	56,7	59,8
		non sign.

Tableau VIII-17 Qualités requises d'un bon chef (question 45)

	ICA	ICF
Compétence au travail	11,8	12,3
Organisation	42,0	50,2
Qualités intellectuelles	9,7	11,6
Qualités sociales	17,4	11,9
Qualités personnelles	19,1	14,1
		non sign.

Tableau VIII-18 Vie privée et promotion (question 42)

Faut-il tenir compte de la vie privée ?	ICA	ICF
Oui	65,0	64,7
Non	35,0	35,3
		non sign.

Cette similitude au niveau des valeurs et des objectifs que poursuivent les groupes d'ingénieurs n'implique pourtant pas l'adoption de moyens semblables. Ainsi, les deux groupes délaissent les grandes entreprises au nom de valeurs professionnelles, recherchant dans la petite et la moyenne un surcroît de créativité et une reconnaissance plus grande de leur statut. Mais, en même temps que les ICF s'écartent de la grande entreprise — dans leur cas, les entreprises d'État —, ils continuent, contrairement aux ICA, à privilégier ces mêmes entreprises d'État comme leviers de croissance économique, ainsi que nous l'avons vu précédemment.

*C. Autorité ou démocratie*

*1. La vie professionnelle*

Peut-on attribuer aux deux groupes d'ingénieurs des attitudes différentes en matière d'autorité et de commandement ? Les qualités attendues d'un bon chef n'ont pas fait apparaître de telles différences; c'est en termes de qualités organisationnelles beaucoup plus que sociales ou personnelles que les ingénieurs ont répondu sur ce point.

Trois autres questions testaient plus spécifiquement l'orientation vers un commandement plutôt autoritaire ou un commandement plutôt démocratique. La première plaçait les ingénieurs dans une situation de subordination face à la hiérarchie organisationnelle; ils devaient estimer les mérites respectifs du fonctionnement de deux entreprises : l'une où les fonctions, responsabilités et normes d'exécution sont définies très clairement; l'autre où la direction laisse une plus grande marge de liberté quant à ces trois sphères de l'organisation du travail (tableau n° VIII-19). Dans les deux groupes, la majorité s'accorde dans le choix d'une organisation aux normes souples, ce qui reflète, à nouveau, le rejet d'un système de contraintes bureaucratiques et la préférence pour un régime où une marge d'initiative plus grande est laissée aux acteurs dans l'exécution.

Tableau VIII-19 Préférence envers la rigidité ou la souplesse des normes (question 41)

	ICA	ICF
Normes rigides	26,3	33,0
Normes souples	73,7	67,0
		non sign.

La seconde question plaçait l'ingénieur dans la situation inverse, celle déterminée par les rapports avec ses subordonnés. Notons ici que le nombre de personnes se trouvant sous les ordres des ingénieurs des deux groupes ne diffère pas sensiblement (tableau n° VIII-20). Cette question revêtait deux aspects : commandement exercé à l'égard des employés de bureau (tableau n° VIII-21) et à l'égard des ouvriers (tableau n° VIII-22).

Le type de commandement que l'on souhaite exercer à l'égard de ses subalternes immédiats n'est pas sans grande affinité avec celui qui se dégage du type de structure dans laquelle on souhaite se trouver. Autrement dit, l'accent est nettement placé sur une structure organisationnelle peu rigide et un commandement tolérant.

Tableau VIII-20 Personnel travaillant sous la direction de l'interviewé (question 9f)

	ICA	ICF
Aucune	19,0	22,8
1 à 4	21,5	26,1
5 à 50	40,9	34,4
51 et plus	18,6	16,6

Tableau VIII-21 Qualité de l'autorité exercée sur les employés de bureau (question 82a)

	ICA	ICF
Ferme	25,8	27,5
Tolérant	74,2	72,5
		non sign.

Tableau VIII-22 Qualité de l'autorité exercée sur les ouvriers (question 82b)

	ICA	ICF
Ferme	48	58,1
Tolérant	52	41,9
		$P = 0,02$

Par contre, lorsqu'il s'agit du personnel ouvrier, le niveau de tolérance baisse fortement. On peut formuler à ce sujet l'hypothèse suivant laquelle le niveau d'autoritarisme serait fonction de la distance sociale qui sépare les ingénieurs des employés ou des ouvriers.

Si on ne constate pas de différence entre les deux groupes d'ingénieurs, en ce qui concerne le type de structure et les rapports avec les employés de bureau, on remarque par contre, chez les ICF, un glissement vers plus d'autoritarisme dans le rapport de commandement avec les ouvriers.

En dépit de cette légère différence, l'analyse des orientations, autoritaires ou démocratiques, confirme que, au niveau de la vie professionnelle dans l'entreprise, ce sont plutôt des traits de ressemblance que de dissemblance entre ICA et ICF qui se dégagent.

## 2. La vie de famille

Par contre, au niveau de certaines zones de la vie privée, spécialement en ce qui concerne les rapports avec les enfants au sein de la famille, la différence entre ICA et ICF s'accroît. Quelles valeurs veut-on transmettre à ses enfants à travers l'éducation qu'on leur donne ? Les ICA et ICF ordonnent pareillement leurs préférences mais, si on se limite à la valeur « autorité » qui nous intéresse plus particulièrement ici, on enregistre une différence très significative entre les deux groupes. Ce sont les ICF qui placent l'accent sur l'autorité.

Tableau VIII-23 Valeurs importantes à transmettre aux enfants (question 96)

	ICA	ICF
Travail	53,7	39,7
Aider les autres	20,7	15,5
Sens de l'épargne	2,8	5,4
Respect de l'autorité	22,8	39,4
$P = 0,001$		

La même conclusion se dégage si l'on considère le degré de tolérance à l'égard des sorties des enfants (tableau n° VIII-24). D'une façon générale, les ICA accordent plus tôt leur autonomie à leurs enfants, et ceci tant aux filles qu'aux garçons. Chez les ICF, la tolérance est généralement moins grande, surtout pour les filles.

Tableau VIII-24 Âge auquel on permet aux filles et aux garçons de sortir seuls le soir (questions 95a et 95b)

	ICA	ICF
Garçon (14-15), fille (14-15)	21,8	9,9
Garçon (14-15), fille (16 ou plus)	28,6	12,4
Garçon (16-17), fille (16-17)	31,5	31,4
Garçon (16-17), fille (18 ou plus)	13,0	21,5
Garçon (18 ou plus), fille (18 ou plus)	5,0	24,8

Ce dernier résultat trouve peut-être un prolongement dans une discrimination plus grande chez les ICF à l'égard de la promotion de la femme dans la vie professionnelle.

Tableau VIII-25 Aptitudes des femmes à occuper des fonctions importantes dans l'industrie (question 91)

Y sont-elles aptes ?	ICA	ICF
Oui	85,5	50,9
Non	14,9	49,1
		$P = 0,001$

Bien que la proportion soit peu élevée en termes absolus, rappelons que les femmes des ICA sont plus nombreuses que celles des ICF à exercer un emploi : 13,1 % contre 6,7 %.

#### D. L'économie

##### 1. L'épargne et les investissements

Appartenant à un même milieu socio-professionnel, vivant dans la même métropole industrielle, les ICA et les ICF pratiquent dans une même proportion le système d'épargne et le système de crédit, et dans l'un et l'autre groupes ethniques, près de la moitié préfèrent épargner et près de la moitié préfèrent emprunter.

Tableau VIII-26 Mode d'acquisition de biens utiles (question 76)

	ICA	ICF
Emprunt	48,3	51,5
Épargne	51,7	48,5
		non sign.

Cette question touche aux comportements de consommation, mais en matière d'investissement, les ICA témoignent très nettement d'un sens de l'adaptation aux valeurs les plus productives de la société industrielle (tableau n° VIII-27). Les ICF manifestent un comportement beaucoup plus prudent, et s'ils investissent autant, leur préférence va à des placements moins rentables mais plus sûrs, tels les immeubles et les obligations. La proportion plus élevée de leurs investissements dans les fonds mutuels confirme d'ailleurs cette tendance. Par contre, le pourcentage des ICF (15,0 %) à accepter de prendre des risques en partant à leur compte est légèrement supérieur à celui des ICA (10,3 %).



Tableau VIII-27 Utilisation optimale d'une importante somme d'argent  
(\$ 100 000) (question 73)

	ICA	ICF
Immeubles	8,9	21,2
Actions industrielles	64,5	34,7
Obligations	2,5	8,4
Fonds mutuels	9,6	16,4
Partir à son compte	10,3	15,0
Divers	4,3	4,4

ftp

Pourtant, les attentes concernant l'intérêt d'un bon placement sont nettement plus élevées chez les ICF que chez les ICA (tableau n° VIII-28). Si les ICA se montrent plus réalistes, les attentes très élevées des ICF peuvent s'interpréter soit comme un manque de familiarité avec le domaine des investissements, soit comme une forme de retranchement dans une zone d'attentes utopiques.

Tableau VIII-28 Intérêt minimal requis pour un bon investissement  
(question 74)

Intérêt	ICA	ICF
6 à 6,9 %	50,4	20,9
7 à 9,9 %	30,3	38,4
10 % et plus	19,3	40,7

$P = 0,001$

Les résultats suivants laissent à penser que cette utopie pourrait traduire un décalage entre leurs aspirations et le jugement qu'ils portent sur leur situation. Lorsqu'on leur demande à partir de quel niveau il est possible d'épargner, les deux groupes manifestent des divergences très nettes (tableau n° VIII-29). En effet, si la majorité des ICA croient qu'il est toujours possible d'épargner, ou d'épargner à partir d'un revenu même faible, c'est l'opinion inverse qui prédomine chez les ICF.

Ces écarts d'attitude peuvent recevoir plusieurs interprétations et être justifiés par une situation de fait : une plus grande charge du milieu familial, proche et lointain, et aussi une mobilité plus réduite, facilitent peu l'épargne chez les ICF. Par ailleurs, leur démarrage plus tardif dans la société industrielle pourrait les conduire à mettre davantage l'accent sur les dépenses de consommation, dépenses liées à la recherche plus intense des signes visibles de statut social.



Tableau VIII-29 Seuil de l'épargne (question 72)

À partir de quel revenu peut-on épargner ?	ICA	ICF
Toujours	45,2	17,9
\$ 5 000	20,0	11,7
\$ 7 500	17,0	31,4
\$ 10 000	10,7	24,8
\$ 12 500 et plus	7,1	14,2
		$P = 0,001$

Chez les ICA, au contraire, des comportements réels d'épargne apparaîtraient plus fréquemment, imprégnés encore d'une éthique protestante privilégiant l'épargne en vue de l'investissement productif. Leur démarrage plus rapide dans la société industrielle et l'appartenance à une société globale plus fortunée pourraient aussi introduire chez eux l'idéologie d'une classe plus riche, qui met l'accent sur les possibilités pour tous d'épargner.

## 2. La fortune

Si les attitudes à l'égard de l'épargne et de l'investissement individuels ont révélé des différences marquées entre les deux groupes, qu'en est-il lorsqu'il s'agit d'établir une estimation des individus auxquels on attribue généralement un rôle prépondérant dans le domaine des investissements ? (tableau n° VIII-30) Contrairement aux résultats précédents, on trouve ici une grande similitude d'appréciation : ICA et ICF évaluent la richesse à partir des mêmes seuils.

Tableau VIII-30 Critère de la richesse financière (question 75a)

Somme minimale	ICA	ICF
\$ 100 000	31,6	24,7
\$ 100 à 499 000	30,1	33,8
\$ 500 000	19,9	19,6
Plus de \$ 500 000	18,4	21,8
		non sign.

Il en est de même si l'on se demande quelles catégories sociales constituent cette classe d'hommes riches : l'un et l'autre groupes citent les financiers, les commerçants et les industriels (tableau n° VIII-31). Quant à l'évaluation des avantages ou des inconvénients apportés par la richesse (tableau n° VIII-32), on constate que deux modèles de sociétés sont proposés ici : l'un met l'accent sur le pouvoir, et l'autre sur la réussite matérielle et la confirmation de la valeur personnelle qu'elle fournit.

Tableau VIII-31 Groupes sociaux détenteurs de richesse (question 75b)

	ICA	ICF
Finance	44,0	47,3
Industrie	22,9	17,9
Politique	-	1,8
Commerce	28,2	20,1
Professions libérales	2,8	2,9
Communautés religieuses	2,1	9,9

ftp

Tableau VIII-32 Apport de la fortune personnelle (question 77)

	ICA	ICF
Soucis	11,2	19,5
Pouvoir	25,6	39,0
Possibilité d'acquérir des biens coûteux	36,1	24,2
Confirmation de la valeur personnelle	27,0	17,3

$P = 0,001$

Le tableau n° VIII-32 montre bien que les deux groupes participent à ces deux modèles, mais les ICF s'expriment plus souvent en termes de soucis et de pouvoir, alors que les ICA s'orientent plus fréquemment vers l'éthique de consommation et de valorisation personnelle.

### *E. La politique*

Qu'en est-il de la vie politique ? ICA et ICF lui accordent-ils la même importance ? Est-elle plus valorisée chez les uns que chez les autres ? Quel type de régime reçoit leur préférence ?

#### *1. L'importance de la vie politique*

Deux questions touchaient à ce problème : l'une, indirecte, cherchait à évaluer les rubriques de journaux les plus lues; l'autre demandait quel était l'apport relatif à la vie collective des différents groupes sociaux (tableaux nos VIII-33 et VIII-34).

Dans les deux groupes, l'intérêt majeur va à la politique, mais de façon plus marquée chez les ICF. L'intérêt de ces derniers se porte massivement sur la politique québécoise, laquelle ne retient que très

faiblement l'attention des ICA, qui s'intéressent nettement plus à la politique canadienne. Celle-ci ne revêt pas plus d'importance pour les ICF que la politique québécoise pour les ICA.

Tableau VIII-33 Catégories préférées d'articles de journaux ou de revues (question 54)

	ICA	ICF
Politique québécoise	5,9	42,0
Politique canadienne	20,7	5,4
Politique internationale	26,2	16,7
	52,8	64,1
Finance — économie	18,6	9,7
Questions sociales	4,8	2,2
	23,4	11,9
Technique	12,1	16,7
Culture	2,8	3,3
Sports	9,0	4,0

$P = 0,001$

Tableau VIII-34 Groupes sociaux utiles à la collectivité (question 51)

	ICA	ICF
Homme politique	11,0	26,8
Syndicaliste	0,4	5,1
	11,4	31,9
Professeur d'université	13,8	14,5
Homme de science	6,0	19,9
	19,8	34,4
Industriel	20,8	9,8
Propriétaire de grand commerce	15,9	10,9
	36,7	20,7
Prêtre	7,1	7,6
Médecin	24,7	5,4

ftp

Il est à remarquer que l'intérêt pour la politique provinciale privilégiée chez les ICF ne s'accompagne pas nécessairement d'un moindre intérêt des ICA pour la politique provinciale en général, mais simplement pour celle du Québec, bien que 35 % d'entre eux soient originaires de cette province. En ce qui concerne l'économie et la finance, les ICA leur portent un intérêt très net, comme d'ailleurs au sport, alors que les ICF s'intéressent davantage à la technique.

L'intérêt accentué des ICF pour la politique et des ICA pour l'industrie et le commerce s'affirme à nouveau dans leur évaluation de l'apport relatif des différents groupes à la vie collective (tableau no VIII-34).

La comparaison ici est générale; elle ne concerne pas que le Québec mais la collectivité. L'ensemble des choix permet d'avancer l'hypothèse d'une structure de perception nettement différenciée, les ICA privilégiant les acteurs économiques, c'est-à-dire les industriels et les commerçants, les ICF privilégiant leur type d'élite, c'est-à-dire l'élite politique et l'élite scientifique. Ce choix des ICF peut s'expliquer par le rôle traditionnel de l'élite politique et par son importance nouvelle, dans la mesure où, au Québec, le politique prend en charge l'économique et où ce fait est valorisé par les ICF, comme l'ont démontré les attitudes à l'égard de la vie économique (question 56). D'autre part, les ICF accordent une même importance aux scientifiques et aux politiques, mais supérieure à celle que leur accordent les ICA.

Quant aux médecins et aux syndicalistes, alors que les ICA accordent aux premiers leur score le plus élevé et aux seconds un score pratiquement nul, les ICF accordent aux uns et aux autres une importance faible mais égale, qui se situe juste au-dessous de celle reconnue aux prêtres. Sur ces dernières évaluations, il n'y a d'ailleurs pas de différence entre les deux groupes.

## *2. Le rôle politique et le comportement civique*

Les ICF sont plus nombreux à reconnaître important l'apport de l'homme politique à la collectivité, mais cette fonction politique est-elle liée à la vie privée de ceux qui l'exercent ?

Tableau VIII-35 Importance de la vie privée d'un homme politique (question 70)

Il faut considérer	ICA	ICF
Sa vie privée et sa vie publique	79,2	45,8
Sa vie publique seulement	20,8	54,2

$P = 0,001$

Ces résultats peuvent être interprétés comme une valorisation plus grande de la vie publique par les ICA, dans la mesure où ils estiment que la vie privée d'un candidat doit être prise en considération. Quant au refus, plus fréquent chez les ICF, de considérer ce critère, il pourrait être interprété comme une réaction à la traditionnelle interférence du religieux et du moral dans les affaires publiques. Le nouveau rôle assigné à la politique qui assume partiellement l'économie tendrait à une rationalisation du rôle politique, dégageant de plus en plus ce rôle de considérations extra-politiques. La combinaison d'un mouvement de réaction à un processus rationalisateur expliquerait chez les ICF cette préférence affirmée pour le critère « vie publique seulement ».

Peut-on déceler dans les deux groupes les symptômes d'un respect rigide ou flexible des prescriptions légales, en matière d'impôt ? (tableau n° VIII-36) La question établit une gradation allant de l'observance stricte au recours à tous les moyens. Mais la distribution se présente de façon telle qu'il est malaisé d'accorder à l'un des deux groupes une tendance plus prononcée dans un sens ou dans l'autre.

Tableau VIII-36 Attitude normale à l'égard de l'impôt (question 84)

	ICA	ICF
Observance à la lettre	40,1	33,3
Profiter des échappatoires prévues par la loi	35,5	54,0
S'en tirer de toutes façons avec le moins de frais	24,4	12,7
		$P = 0,001$

### 3. Le type de régime économique et politique

#### a. Mesures économiques

Au niveau des politiques économiques, les deux groupes avaient le choix entre un système libre-échangiste et un régime à tendance autarcique (tableau n° VIII-37). Les résultats présentent un choix bien contrasté. Les ICF se partagent presque également entre les deux tendances alors que les ICA adhèrent à peu près tous au modèle libre-échangiste. Les ingénieurs devaient ensuite se prononcer sur l'élévation ou l'abaissement des barrières tarifaires (tableau n° VIII-38). Les deux groupes se déclarent en majorité peu favorables au protectionnisme douanier, infirmant ainsi une tendance autarcique chez les ICF. Voyons maintenant si cette attitude économique s'accompagne d'une option en faveur d'un interventionnisme plus grand de l'État.

Tableau VIII-37 Autarcie ou commerce international (question 61)

Une économie doit	ICA	ICF
Produire le plus possible les produits dont elle a besoin	17,5	47,8
Mettre l'accent sur les échanges internationaux	82,5	52,2
		$P = 0,001$

Tableau VIII-38 Attitude à l'égard des barrières tarifaires (question 63b)

	ICA	ICF
Abaissier	89,6	73,6
Élever	10,4	26,4
		$P = 0,01$

*b. Mesures politiques*

Doit-on encourager l'entreprise privée ou plutôt nationaliser certaines industries ? (tableau n° VIII-39) Les ICF adoptent là une attitude significativement différente, 29 % d'entre eux favorisant une intervention de l'État. Cette option s'accompagne du choix d'un style de conduite des affaires de l'État (tableau n° VIII-40). Bien qu'il ne s'agisse pas d'une option entre deux régimes opposés, mais du renforcement de l'une ou l'autre des tendances, il n'en reste pas moins que près d'un tiers des ICF favorisent le renforcement de mesures politiques autoritaires.

Tableau VIII-39 Maintien de l'entreprise privée ou nationalisation (question 63a)

	ICA	ICF
Entreprise privée	95,2	71
Nationalisation	4,8	29
		$P = 0,001$



Tableau VIII-40 Régime autoritaire ou démocratique (question 69)

Type de régime favorisé	ICA	ICF
Régime autoritaire	14	30,2
Régime démocratique	86	69,8
$P = 0,001$		

Cependant, c'est de toutes façons à un régime mettant l'accent sur la compétition plus que sur l'égalitarisme que les deux groupes réservent leurs préférences (tableau n° VIII-41). (Mentionnons que la société américaine était proposée comme exemple permettant de souligner soit la réussite par la compétition, soit les inégalités sociales entraînées par ce même système.)

Tableau VIII-41 Régime compétitif ou égalitaire (question 80)

Type de régime favorisé	ICA	ICF
Régime compétitif	80,0	77,3
Régime égalitaire	19,9	22,7

### Conclusion

Les résultats obtenus dans le paragraphe qui cherchait à contrôler l'opposition vie privée/travail permettent de constater que les ICF viennent de familles plus grandes que les ICA, ont eux-mêmes des familles plus nombreuses et, bien que gagnés à l'idée de planification des naissances, se proposent comme objectif des familles qui restent plus importantes que celles des ICA. Si la famille étendue est un des traits les plus marquants de la société traditionnelle, nul doute que les affinités des ICF pour les valeurs traditionnelles restent plus grandes.

Par contre, les ICA semblent accorder plus d'importance à la famille qu'au travail. Cette double caractéristique, famille moins étendue mais vie plus centrée sur cette famille réduite, indiquerait leurs affinités plus grandes pour le stade de la société industrielle avancée, celui de la privatisation.

Les raisons que l'on se donne enfin pour travailler caractérisent assez nettement les deux groupes : c'est la crainte de l'ennui, typique sans doute des valeurs de la société d'abondance, qui domine chez les ICA; c'est la pression de l'obligation morale ou du besoin de créativité, plus propre à la société traditionnelle ou à la première phase de la société industrielle, qui domine chez les ICF.

Au niveau de l'entreprise, les valeurs semblent se rapprocher dans les deux groupes au point d'être presque toujours semblables. Dans le *melting pot* de l'entreprise, les caractéristiques ethniques ne sont plus le cadre de référence ou le support de systèmes de valeurs opposées. Une variable seulement crée des différences : celle de la taille et du type d'entreprise. De nouveau, ici, des options différenciées sont en relation avec des situations différentes. Les ICA travaillent plus souvent dans les grandes entreprises privées, ce qui s'explique par la structure du pouvoir dans les grandes entreprises privées et publiques, les premières étant aux mains des Canadiens anglais, les secondes, aux mains des Canadiens français. Cependant, une même réaction antibureaucratique apparaît dans les deux cas, renforcée encore chez les ICF par le rêve et la réalité entrepreneuriaux : c'est, en effet, vers de petites entreprises privées et des bureaux d'ingénieurs-conseils qu'ils s'orientent dans leur grande majorité. En fonction de quoi, on verrait le groupe des ICF répartir également ses options entre la petite manufacture caractéristique de la première phase de la société industrielle et les bureaux techniques caractéristiques de la seconde.

La même ressemblance caractérise les valeurs en matière de commandement dans l'entreprise, qu'il s'agisse de la définition d'un chef ou du type d'organisation préféré. Mais dès que sont franchies les limites de l'entreprise, la ressemblance éclate, différenciant, quant à ces mêmes valeurs de commandement, ICA et ICF : en effet, les premiers adoptent vis-à-vis de la vie des membres de la famille des attitudes plus permissives, plus modernistes, les seconds inclinant à nouveau du côté traditionnel, celui où l'autorité des parents est plus accentuée et le rôle de la femme plus confiné au foyer.

Au plan des valeurs de la vie économique, le recours à l'emprunt ou à l'épargne aurait pu séparer les deux groupes, mais il n'en est rien; on semble se trouver ici devant des attitudes qui relèvent d'une position semblable des deux groupes aux stades de la société industrielle. Cependant, s'ils s'accordent sur les sources de crédit à la consommation immédiate, ils se dissocient à nouveau quant à l'utilisation à long terme des capitaux, les ICF orientant plus volontiers leurs réserves économiques vers des valeurs traditionnelles, alors que les ICA choisissent plus souvent les placements caractéristiques de la société industrielle. On peut interpréter de la même façon les estimations, nettement plus réalistes et mieux ajustées chez les ICA, de l'intérêt escompté des capitaux, ou encore déceler chez les ICF un espoir d'accumulation plus grande lié à celui de la petite entreprise que l'on a vu plus vivant chez eux. C'est pourtant chez les ICA qu'on voit réapparaître la conception puritaine de l'argent et de la richesse, comme si l'on touchait soudainement à une valeur fondamentale de la société anglo-saxonne.

Au plan de la vie publique, les ICF valorisent plus fréquemment les aspects politiques et techniques, alors que les ICA mettent plus souvent l'accent sur l'économique et le social, et cela par l'indice des rubriques de journaux le plus fréquemment lues que par l'importance

accordée aux différents rôles sociaux dans la vie publique. Ces orientations des ICA les situeraient, cette fois, plus nettement dans les deux phases de la société industrielle, alors que la valorisation du politique, plus propre aux ICF, situerait ceux-ci soit dans la société traditionnelle, soit dans une phase plus avancée de la société industrielle, celle qui, dans une économie mixte, est caractérisée par l'intervention de l'État, hypothèse qui se trouverait renforcée par leur valorisation constante du technique et du scientifique.



La variable ethnique a été abordée jusqu'à présent dans les champs professionnel, économique, politique et dans celui des valeurs sociales. Il s'agit d'en explorer certaines dimensions culturelles et de cerner finalement le problème de l'identification culturelle des deux groupes, qui se situe à trois niveaux : les relations sociales — leur apprentissage à l'école, leur pratique dans l'entreprise et dans les relations amicales; la perception que chacun des groupes a de l'autre et de lui-même — discordance ou concordance de ces images; les sociétés d'appartenance auxquelles on se réfère et le type de nationalisme qui s'en dégage.

#### *A. Les fréquentations scolaires et sociales*

Les ICF sont très massivement attachés à ce que l'instruction de leurs enfants se fasse dans leur langue (tableau n° IX-1). Ce résultat est d'autant plus remarquable que c'est dans le groupe français que l'apprentissage de l'autre langue s'impose très souvent comme une nécessité. En revanche, on voit s'établir, chez les ICA, une répartition bilingue. On trouve un plus grand nombre d'ICA disposés à ce que l'instruction de leurs enfants se fasse complètement en français, que d'ICF prêts à accepter un enseignement en anglais pour leurs enfants. Cette tendance se retrouve dans le choix plus

Tableau IX-1 Préférence quant à la langue d'instruction des enfants (question 93b)

	ICA	ICF
Français	9,3	70,2
Anglais	43,1	3,6
Les deux	47,6	26,2
		$P = 0,001$

fréquent, par les ICA, d'écoles regroupant des élèves de milieux différents, ceci pouvant procéder chez eux d'une tendance plus grande à une certaine ouverture vers des milieux sociaux ou ethniques différents du leur (tableau no IX-2). Parallèlement, le réseau d'interaction des ingénieurs eux-mêmes reflète le même degré d'ouverture vers des contacts interethniques (tableau no IX-3).

Ainsi, non seulement les ICA projettent-ils sur leurs enfants un modèle d'ouverture ethnique, mais leurs relations sociales traduisent la même adhésion personnelle à ce modèle. Ils fréquentent socialement plus de personnes d'autres groupes ethniques et, au niveau de leurs relations amicales, ils établissent plus de contacts avec

Tableau IX-2 Préférence quant à la composition sociale du milieu scolaire (question 93a)

	ICA	ICF
Milieu hétérogène	73,7	58,1
Milieu homogène	26,3	41,9
$P = 0,001$		

Tableau IX-3 Contacts sociaux avec des membres d'autres groupes ethniques (question 99c)

Avez-vous de tels contacts ?	ICA	ICF
Oui	82,4	48,0
Non	17,6	52,0
$P = 0,001$		

Tableau IX-4 Ethnie des trois meilleurs amis (question 99b)

Nombre d'amis	ICA			ICF		
	CA*	CF	Néo	CF	CA	Néo
0	4,2	76,2	82,1	1,0	87,2	90,8
1	10,3	21,4	12,9	4,8	10,3	8,4
2	25,2	2,1	5,0	12,4	2,5	0,8
3	60,3	0,3	-	81,8	-	-

\* CA : ami canadien-anglais; CF : ami canadien-français; Néo : ami néo-canadien.



d'autres groupes ethniques que les Canadiens français (tableau n° IX-4). Les taux différents de fréquentations sociales ou amicales selon l'ethnie pourraient être interprétés non seulement en termes d'ouverture d'un groupe vers les autres, mais aussi en termes d'exposition sociométrique, plus grande chez les Canadiens anglais dans la mesure où ils constituent une minorité.

## *B. La communication et les barrières linguistiques*

### *1. La langue et la culture*

Le problème des communications linguistiques s'avère un indicateur de première importance dans l'identification culturelle. Qu'il s'agisse de consommation culturelle, de promotion ou de communication au travail, la langue est-elle davantage un facteur de rapprochement ou de distanciation sociale ?

L'écoute de la radio et de la télévision constitue une première approche plus volontaire de ce problème (tableau n° IX-5). Les ICF sont nettement plus nombreux à être familiarisés avec la langue de l'autre groupe; l'écoute fréquente de la radio ou de la télévision en langue française par les ICA est en effet beaucoup plus rare.

Tableau IX-5 Fréquence d'écoute de la radio et de la télévision dans l'autre langue (question 87)

	ICA	ICF
Souvent	9,0	41,2
Parfois	68,5	53,1
Jamais	22,5	5,8

$P = 0,001$

### *2. La langue et le travail*

Le milieu de travail présente par contre des structures linguistiques beaucoup plus déterminées puisqu'il reflète directement la division du travail au Québec selon l'ethnie. On peut donc s'attendre à ce que le problème de la langue parlée au travail se pose fort différemment selon l'ethnie des répondants et selon leur niveau hiérarchique (tableau n° IX-6).

Les ICA emploient dans leur majorité plus souvent leur propre langue que le français au travail. Il est à noter que l'emploi de l'anglais est d'autant plus fréquent que le niveau hiérarchique de la personne à laquelle on s'adresse est plus élevé. À peu près aucun anglophone n'utilise le français aussi ou plus fréquemment que sa propre langue.

Tableau IX-6 Langue utilisée au travail avec les supérieurs, les égaux et les subalternes (questions 18a, 18b et 18c)

Fréquence d'utilisation	ICA			ICF		
	sup.	égaux	sub.	sup.	égaux	sub.
Anglais - 100 % du temps	93,6	82,3	78,2	17,6	5,9	4,5
Anglais - 60-80 % du temps	5,2	16,6	18,9	6,4	10,7	6,7
Les deux également	0,6	0,6	1,1	8,4	10,0	6,0
Français - 60-80 % du temps	-	0,6	1,7	12,2	20,8	23,9
Français - 100 % du temps	-	-	-	55,3	52,6	59,0

Chez les ICF, l'utilisation à 100 % de l'anglais comme langue de travail est aussi plus fréquente avec les supérieurs qu'avec les égaux et les inférieurs; à mesure que l'on gravit les échelons hiérarchiques, l'utilisation de la langue anglaise prend de l'importance. Toutefois, la majorité des ICF de l'échantillon emploient le français plus fréquemment que l'anglais comme langue de travail.

Les ICF se situent cependant loin devant les ICA pour ce qui est de l'emploi fréquent des deux langues; dans leurs relations de travail, ils utilisent en effet (selon le niveau hiérarchique de la personne à laquelle on s'adresse) l'anglais au moins autant que le français dans une proportion qui varie entre 17,2 et 32,4 % contre 0,6 à 2,8 % chez les ICA.

Il est à noter que ce nombre pourrait être beaucoup plus élevé chez les ICF, si l'on s'adressait seulement à certaines catégories d'ingénieurs, ceux de l'industrie en particulier. La part considérable d'ICF employés dans des institutions essentiellement unilingues françaises (maisons d'enseignement, ville de Montréal et autres municipalités, gouvernement provincial, services publics divers) ou à leur compte, diminue largement la proportion de ceux qui doivent utiliser l'anglais au travail.

Tableau IX-7 Statut des ingénieurs (question 9b)

	ICA	ICF
Seul	3,5	3,6
Associé	4,5	12,0
Salarié	89,3	18,5
Combinaison de deux statuts	2,8	2,2

$P = 0,01$

Tableau IX-8 Type d'entreprise où travaillent les ingénieurs (question 9a)

	ICA	ICF
Maison d'enseignement	2,4	7,6
Bureau d'ingénieurs-conseils	6,2	21,3
Petite entreprise	13,8	10,8
Grande entreprise	70,0	26,0
Hydro-Québec	1,7	9,0
Ville de Montréal et autres municipalités	1,4	15,8
Gouvernement provincial	0,3	4,0
Gouvernement fédéral	0,3	2,2
Régies publiques	3,8	3,2

ftp

Il faudrait circonscrire davantage la situation des ICF employés dans les grandes entreprises. Cependant, la distribution des ICF de notre échantillon, d'ailleurs fidèle à leur répartition dans la région de Montréal, illustre leur tendance à s'orienter ou à être employés dans les entreprises où ils ont effectivement l'occasion de s'exprimer dans leur langue maternelle.

L'usage de la langue dans les rapports quotidiens de travail est un problème qui ne revêt pas un caractère indispensable; c'est une structure sociale qui en détermine l'emploi prépondérant. L'usage d'une langue comme véhicule purement technique a un autre sens, et peut s'inscrire dans un univers économique beaucoup plus vaste que celui où se trouvent les deux groupes d'ingénieurs de Montréal. C'est donc un argument fréquemment avancé dans l'industrie que le caractère indispensable de l'anglais comme langue technique. Dans quelle mesure les deux groupes étudiés s'accordent-ils sur ce point ?

Le résultat montre une différence significative (tableau n° IX-9). Si la grande majorité des ICA estiment leur langue indispensable

Tableau IX-9 L'anglais comme langue technique dans l'industrie (question 59)

Est-il indispensable au Québec ?	ICA	ICF
Oui	92,1	66,1
Non	7,9	33,9

 $P = 0,001$

comme outil de travail, le tiers des ICF rejettent cette opinion. Bien que la question ait été posée en termes très généraux, il est permis de supposer que la situation personnelle exerce une certaine influence sur cette option, selon que l'on travaille dans une entreprise administrée par des Canadiens anglais ou des Canadiens français.

Si l'unilinguisme est proposé, que ce soit en français pour ce qui est des ICA, ou en anglais pour ce qui est des ICF, cette pratique constitue-t-elle un obstacle à la réussite ? Le tableau n° IX-10 nous éclaire sur ce point. Il faut prendre en considération que cette situation est en fait actuellement vécue par l'un des deux groupes, celui des ICF; chez les ICA, c'est là une situation exceptionnelle, et, pour la plupart d'entre eux, hypothétique. Rien d'étonnant donc à ce que la perception de l'unilinguisme comme obstacle soit encore plus vive chez les ICF. Il est intéressant de constater en même temps que l'hypothèse d'un unilinguisme anglais est perçue par les ICA comme un obstacle à leur réussite.

Tableau IX-10 Unilinguisme et réussite professionnelle (question 48)

L'unilinguisme est-il un obstacle ?	ICA	ICF
Oui	77,6	85,5
Non	22,4	14,5

$P = 0,05$

### *C. La perception mutuelle des ICA et des ICF*

Deux questions nous permettaient d'évaluer la perception qu'ont les ICA des Canadiens français, et réciproquement : la première portait sur les ICA et ICF en général; la seconde, sur les hommes d'affaires de chacun des deux groupes. Cette dernière était posée en termes de comparaison à établir entre les deux groupes, alors que la première demandait une évaluation, en termes absolus, des qualités et des défauts propres à chacun d'eux.

#### *1. La perception des qualités de l'autre groupe ethnique*

Le tableau n° IX-11 nous permet d'affirmer que les ICF valorisent les ICA principalement sur deux plans : le plan du travail (astucieux, consciencieux, responsables, organisateurs, etc.) et le plan personnel et social (exubérants, sincères, calmes, optimistes, joviaux, s'adaptent bien, etc.). Quand ils décrivent les ICF, les ICA mentionnent surtout leurs qualités personnelles et sociales. À peine 10,7 % les définissent en termes de valeur au travail.

Tableau IX-11 Qualités de l'autre groupe ethnique (question 19a)

	ICA	ICF
	Qualités attribuées au groupe C. F.	Qualités attribuées au groupe C. A.
Travail	10,7	48,0
Personnelles et sociales	51,2	32,5
Morales	12,8	10,1
Intellectuelles	7,3	3,2
Biculturalisme	5,5	2,5
Politique	0,3	-
Autres	0,3	-
Sans réponse	11,8	3,6

ftp

## 2. La perception des qualités des membres de son propre groupe

En comparant la perception qu'a de lui-même chacun des deux groupes à celle ressentie à son endroit par l'autre groupe, on est amené à faire certaines observations (tableau n° IX-12). On a vu que 48 % des ICF définissent les ICA en termes de qualités au travail. Il apparaît ici que 26 % seulement de ceux-ci mentionnent ces qualités comme particulièrement caractéristiques de leur groupe. Il y aurait donc là une certaine surévaluation des ICA par les ICF. Notons cependant que près de 22 % des ICA n'ont pas répondu à cette question. D'autre part, il semble découler de ce tableau que le groupe C. F. est en mesure de se sentir fortement dévalorisé sur le plan du travail, 31 % des ICF plaçant dans ce domaine la source principale de leurs qualités alors qu'à peine 10,7 % des ICA la leur reconnaissent.

Tableau IX-12 Qualités des membres de son propre groupe ethnique (question 19c)

	ICA	ICF
	Qualités attribuées au groupe C. A.	Qualités attribuées au groupe C. F.
Travail	26,0	31,0
Personnelles et sociales	32,2	38,3
Morales	4,2	13,4
Intellectuelles	5,9	8,4
Biculturalisme	4,8	4,7
Politique	4,2	-
Autres	1,0	-
Sans réponse	21,9	4,3

ftp



### 3. La perception des défauts de l'autre groupe ethnique

Le tableau n° IX-13 nous montre une fois de plus que la perception qu'a l'ICA de l'ICF sur le plan du travail est plutôt défavorable puisque ce trait, qui n'était à peu près pas apparu au niveau des qualités, acquiert une certaine importance au niveau des défauts (16 %). La proportion des défauts est cependant plus forte sur le plan personnel et social que sur le plan du travail.

Tableau IX-13 Défauts attribués à l'autre groupe ethnique (question 19b)

	ICA	ICF
	Défauts attribués au groupe C. F.	Défauts attribués au groupe C. A.
Travail	16,3	8,3
Personnels et sociaux	29,8	43,7
Moraux	7,6	9,4
Intellectuels	11,8	8,7
Biculturalisme	10,0	18,4
Politique	2,4	1,4
Autres	1,4	-
Sans réponse	20,8	10,1

Réciproquement, les ICF s'en tiennent à leur valorisation des ICA sur le plan du travail, puisque 8,3 % à peine leur attribuent des défauts dans ce domaine, l'appréciation la plus défavorable se situant sur le plan personnel et social. Autre fait à remarquer : les ICF, dans une proportion appréciable, reconnaissent aux ICA des défauts ressortissant au biculturalisme, comme leur manque de patrio-

Tableau IX-14 Défauts des membres de son propre groupe ethnique (question 19d)

	ICA	ICF
	Défauts attribués au groupe C. A.	Défauts attribués au groupe C. F.
Travail	6,9	24,2
Personnels et sociaux	34,6	44,4
Moraux	7,3	11,6
Intellectuels	8,0	6,9
Biculturalisme	16,6	5,8
Politique	3,1	0,4
Autres	0,7	2,5
Sans réponse	22,8	4,3



tisme, leur unilinguisme, leur inaptitude à comprendre l'autre groupe. Les ICA sont, pour leur part, peu nombreux à percevoir ces défauts chez les ICF.

#### 4. Défauts perçus dans son propre groupe ethnique

Le tableau n° IX-14 nous permet de constater que, concernant les défauts des ICF sur le plan du travail, ICA et ICF s'accordent dans leur perception, et que, concernant les défauts des ICA sur le plan biculturel, les ICA relèvent chez eux les mêmes que les ICF leur avaient imputés. Le reproche adressé ici par les ICA se doublerait donc d'un sentiment de culpabilité au sein de leur groupe.

#### D. Les pôles de référence nationaux

La préférence culturelle peut être saisie à un niveau plus global, celui des pays auxquels les ingénieurs se réfèrent comme pôle d'influence sociale. Une première question nous renseigne sur la préférence des ICF et des ICA pour les films étrangers (tableau n° IX-15). Bien qu'il puisse être conditionné par le système de distribution, ce choix indique de toute façon un certain pôle de référence.

Tableau IX-15 Pays d'origine des films préférés (question 89)

	ICA	ICF
France	2,2	59,5
Angleterre	42,3	3,1
Italie	8,6	11,2
États-Unis	46,8	26,3
$P = 0,001$		

Le résultat indique que la préférence des ICF pour les films français est plus grande que celle des ICA pour les films anglais, l'attrait des films américains s'avérant cependant beaucoup plus prononcé chez les ICA.

La question suivante visant à faire jouer ces mêmes modèles nationaux au niveau de la formation supérieure préférée pour les enfants, ce sont donc les trois modèles : France, États-Unis, Angleterre, qui étaient principalement testés, auxquels fut ajoutée la rubrique « autres provinces du Canada », mentionnée par certains interviewés, de la préenquête. La question se subdivisait en deux sous-questions, utilisées selon la profession des interviewés. La première portait sur les études de génie (tableau n° IX-16). Sur ce point, il y pratiquement unanimité : la supériorité de l'enseignement dispensé dans ce domaine aux États-Unis est reconnue par tous. Il faut cependant

noter que l'évaluation de ces études faites en Angleterre par les ICA est comparativement plus positive que celle de ces mêmes études faites en France par les ICF.

Cette première question risquait de se trouver fortement influencée par la supériorité trop manifeste des USA dans le domaine technique. Une seconde question moins spécifique, qui nous permettait d'isoler davantage les pôles de référence nationaux, portait sur les pays préférés en vue d'études supérieures autres que le génie (tableau no IX-17).

Ici à nouveau apparaît, avec un écart d'environ 20 %, un choix plus marqué des ICF pour la France que des ICA pour l'Angleterre. La pré-

Tableau IX-16 Études supérieures de génie, hors du Québec (question 26a)

	ICA	ICF
France	1,5	6,9
Angleterre	9,1	4,6
États-Unis	83,8	85,3
Autres provinces du Canada	5,6	3,2
		$P = 0,01$

Tableau IX-17 Études supérieures en général, hors du Québec (question 26b)

	ICA	ICF
France	6,2	53,6
Angleterre	34,8	7,2
États-Unis	42,2	34,9
Canada	16,8	4,2
		$P = 0,001$

Tableau IX-18 Pays où l'on aimerait vivre (question 103)

	ICA	ICF
Ailleurs au Canada	82,2	43,4
États-Unis	10,0	38,8
France	0,4	16,5
Angleterre	1,5	1,3
Sans réponse	5,9	-

férence plus marquée des ICA pour les États-Unis se manifeste ici de la même façon que pour les films, mais ces tendances se renversent partiellement lorsqu'on demande aux ingénieurs quel serait leur choix s'ils décidaient d'aller vivre ailleurs (tableau n° IX-18).

L'attraction de la France pour les ICF se manifeste à nouveau plus forte que celle de l'Angleterre pour les ICA. En revanche, 82,2 % des ICA choisissent le reste du Canada et 38,8 % des ICF les USA qui semblent exercer sur eux une attraction presque aussi forte que les autres provinces du Canada.

E. Les relations sociales intimes

Des trois thèmes d'identification que constituent la religion, la profession et l'ethnie, lequel revêt le plus d'importance chez les ICA et chez les ICF ? Nos sujets devaient se placer hypothétiquement dans une situation où ils auraient à donner leur avis sur un conjoint éventuel pour leur fille (question 101). L'introduction d'un étranger dans une famille semble être une question particulièrement sensible, où l'expression des « distances sociales », si elles existent, a le plus de chance de se manifester.

Chacun des interviewés devait ranger les conjoints éventuels en fonction de caractéristiques religieuses (catholique, protestant, sans religion), ethniques (Canadiens anglais, Canadiens français), et professionnelles (profession libérale, col blanc, ouvrier spécialisé), groupées par paire, comme, par exemple, dans la question 101 :

*Parmi les individus ayant les caractéristiques suivantes, pourriez-vous ranger par ordre, ceux que vous préféreriez que votre fille épouse, compte tenu du fait que vous la laissez évidemment entièrement libre.*

Exemple de réponse :

	Professionnel	Col blanc	Ouvrier spécialisé
ICF	1	3	5
ICA	2	4	6

La moyenne des scores attribués à chaque paire, par exemple Canadiens français-professionnel, Canadien français-col blanc, etc., fut ensuite établie pour les ICA et pour les ICF. Une moyenne faible indiquait une paire préférée. À partir de ces moyennes, il fut possible d'évaluer la préférence pour la religion, l'ethnie ou la profession.

De façon globale, on peut dire que chez les ICF la religion passe nettement avant l'ethnie et la profession en tant que critère de discrimination; la profession semble légèrement plus importante que l'ethnie. Chez les ICA, la religion ne vient que légèrement avant la profession, laquelle semble nettement plus importante que l'ethnie.

On ne peut dire qu'il y ait des inversions dans l'ordre des préférences exprimées par les ICF et les ICA, mais on constate des différences assez marquées dans le degré d'intensité avec lequel un facteur est préféré à un autre.

Ainsi, la religion reste le facteur le plus important de discrimination ou de distance sociale pour les deux groupes (tableau n° IX-19); cependant, alors que, chez les ICF, cette préférence est très nette et sans ambiguïté, elle ne paraît que mitigée chez les ICA. Il faut toutefois noter que, sur le plan religieux, le groupe des ICA est beaucoup moins homogène que celui des ICF et que, par ailleurs, le choix religieux devait se faire entre un catholique, un protestant et un « sans religion ». Si l'on veut comparer sans arbitraire les attitudes face à la religion, il paraît nécessaire d'isoler d'une part les ICF catholiques, soit à peu près la totalité des ICF, et d'autre part les ICA protestants, soit à peu près 60 % des ICA.

Tableau IX-19 Religion et profession d'un éventuel conjoint pour la fille de l'ingénieur (question 101c)

	ICA protestant	ICF catholique
<i>Protestant</i>		
professions libérales	1,10 1*	3,68 4*
col blanc	2,76 2	5,27 5
ouvrier	4,39 4	5,88 6
<i>Catholique</i>		
professions libérales	4,35 3	1,08 1
col blanc	5,13 6	2,67 2
ouvrier	6,53 7	3,20 3
<i>Sans religion</i>		
professions libérales	5,06 5	6,34 7
col blanc	6,60 8	7,72 8
ouvrier	7,80 9	8,32 9

\* Les chiffres en italique indiquent l'ordre de préférence.

La préférence pour la religion au sein du groupe des ICA protestants apparaît alors beaucoup plus nette, mais elle est moins marquée chez les ICF catholiques. Ainsi, un catholique ouvrier est préféré à un protestant de profession libérale par l'ICF catholique, alors que le protestant anglais préférera un catholique de profession libérale à un protestant ouvrier. Par ailleurs, le conjoint sans religion est plus radicalement rejeté chez les ICF catholiques que chez les ICA protestants : il est le dernier à être choisi, quelle que soit sa profession, par le groupe catholique français, mais le conjoint sans religion de profession libérale est préféré au catholique col blanc ou ouvrier chez les ICA protestants. En outre, les



scores accordés aux conjoints sans religion sont toujours moins élevés (ce qui indique un rejet moins radical) chez ces derniers.

D'autre part, la profession est un facteur de discrimination plus important que l'ethnie tant chez les ICF que chez les ICA, mais relativement moins important chez les premiers. Le Canadien anglais professionnel est choisi avant le Canadien français col blanc par l'ICF, la réciproque jouant également pour l'ICA. Cependant, alors que celui-ci donne un rang moyen de 2,24 au Canadien français professionnel, l'ICF accorde au Canadien anglais professionnel un rang moyen de 2,82. Bien plus, l'ICF préfère nettement un Canadien français ouvrier à un Canadien anglais col blanc (score moyen : 3,46 contre 4,87), alors que le Canadien anglais préfère, dans tous les cas, un individu du groupe ethnique opposé mais de même profession à un individu de son propre groupe dont la profession le situerait plus bas dans l'échelle du prestige social. Le tableau n° IX-20 nous permet aussi de dire que l'ethnie est un facteur de distance sociale relativement plus important chez les ICF que chez les ICA.

Tableau IX-20 Ethnie et profession d'un éventuel conjoint pour la fille de l'ingénieur (question 101a)

	ICA		ICF	
<i>Canadiens anglais</i>				
professions libérales	1,06	1	2,82	2
col blanc	2,82	3	4,87	5
ouvrier	4,19	5	5,34	6
<i>Canadiens français</i>				
professions libérales	2,24	2	1,04	1
col blanc	4,07	4	3,02	3
ouvrier	5,35	6	3,46	4

Ceci peut être vérifié par une autre méthode. En effet, s'il est très facile de prévoir quel sera, au niveau de chacune des questions qui nous ont permis d'élaborer ce test, le premier choix de l'ingénieur (il commence toujours par choisir un conjoint de son ethnie, de la classe professionnelle la plus élevée et de sa religion, s'il en a une), le deuxième choix nous permet de déterminer à quel niveau il est prêt à céder au premier. Ainsi, à la question traitant de la profession et de l'ethnie, il choisira toujours, comme conjoint préféré, le professionnel de son groupe ethnique. Cependant, lorsqu'il devra dire, lors du second choix, s'il donne la préférence au professionnel du groupe ethnique opposé ou au col blanc de son propre groupe, il cédera soit sur le plan de l'ethnie (premier choix) soit sur le plan de la profession (second choix). Ce choix donne un indice de ce qui, de prime abord, constitue pour chacun le facteur le plus important de distance sociale.

Nous avons calculé le pourcentage de ceux qui, au sein de chaque groupe, optent en premier lieu pour l'ethnie ou pour la profession.

	ICA	ICF
Ethnie préférée*	30,4	53,5
Profession préférée**	69,6	46,5

Ce tableau montre le bien-fondé de l'hésitation à placer, à l'aide des scores moyens, le facteur « profession » avant le facteur « ethnie » chez les ICF. Il indique aussi nettement que les ICA, contrairement aux ICF, accordent une importance beaucoup plus marquée à la profession qu'à l'ethnie comme facteur de discrimination au sein des relations sociales intimes.

Il semble donc possible de conclure que, pour les ICF, la religion paraît être un critère d'identification sociale plus important que l'ethnie et la profession. Pour les protestants anglais de notre échantillon, ce facteur vient également en tête, mais la marge qui le sépare de la profession est sensiblement réduite. Elle l'est encore plus si l'on considère le groupe des ICA en général.

La profession constitue donc un facteur de distance sociale beaucoup plus important pour les ICA que pour les ICF, et qui l'emporte nettement sur l'ethnie. Chez les ICF, l'ethnie semble aussi se situer à la troisième place dans l'échelle d'évaluation. Cependant, la priorité accordée à la profession par rapport à l'ethnie paraît plus précaire que chez les ICA.

#### *F. La société d'appartenance*

Un dernier point nous renseigne sur les groupes de référence les plus valorisés chez les ICA et les ICF, selon qu'ils mettent l'accent sur leur appartenance à divers types de société.

Tableau IX-21 Société d'appartenance (question 102, premier choix seulement)

	ICA	ICF
Canadienne	87,9	30,7
Nord-américaine	5,2	5,0
Canadienne-française	-	54,5
Francophone	0,3	9,0
Anglophone	4,2	0,4
Canadienne-anglaise	2,4	0,4

\* L'ingénieur opte pour le col blanc de son groupe ethnique.

\*\* L'ingénieur opte pour le professionnel du groupe ethnique opposé.



Plus de neuf ICA sur dix se disent d'abord polarisés par l'idée d'une société « canadienne », laissant en veilleuse l'idée d'un équilibrier social « nord-américain » ou « canadien-anglais ». Pour les ICF, au contraire, la référence « canadienne-française » est prioritaire, le choix de la société « canadienne » venant en second lieu. De même, le choix d'une société « francophone » est relativement plus important pour les ICF que celui d'une société « anglophone » pour les ICA.

### 1. Les sociétés d'appartenance chez les ICF et chez les ICA

Si l'on combine les deux premiers choix, il est possible de reconstituer une typologie d'appartenance (tableau n° IX-22). À un pôle extrême de celle-ci, certains ICF se définissent d'abord comme « canadiens-français » et « francophones », tandis qu'à l'autre extrémité on retrouve des ingénieurs se percevant d'abord comme « canadiens » et « nord-américains ». Les niveaux intermédiaires sont constitués de divers regroupements alliant des modèles « canadiens » et « canadiens-français ». Ce continuum, qui va de types très centrés sur le Canada français à d'autres qui minimisent cette appartenance, peut nous fournir une approximation valable de l'intensité et de l'orientation du sentiment nationaliste chez les ICF\*.

Tableau IX-22 Typologie des ICF selon la société d'appartenance

	Nombre	%
Canadiens français et francophones	54	20,8
Canadiens français et Canadiens	100	38,8
Canadiens et Canadiens français ou Canadiens et francophones	63	24,3
Canadiens et Nord-Américains ou Nord-Américains et Canadiens	23	8,9
Canadiens français d'Amérique du Nord	19	7,3

Quant aux ICA, le choix massif qu'ils font de la société « canadienne » ne permet guère d'opérer un regroupement contrasté d'options; certaines catégories, importantes pour évaluer le nationalisme des ICF, font défaut chez les ICA où on ne retrouve pas par exemple l'option « Canadien anglais » ou « anglophones ». Les regroupements retenus sont indiqués au tableau n° IX-23.

Ces résultats appuient l'hypothèse selon laquelle les ICA se définissent assez peu en termes ethniques. Si l'on considère les deux

---

\* Le groupe des « Français d'Amérique du Nord » a été soustrait de la typologie pour l'analyse en termes de continuum. Ils constituaient une catégorie marginale sur ce continuum regroupant deux pôles extrêmes d'appartenance (7,3 %).

premiers choix, les ICA se définissent même davantage comme Nord-Américains (33 %) que comme Canadiens anglais (28 %). La catégorie intermédiaire des Canadiens anglophones demeure assez ambiguë; elle peut aussi bien renforcer l'appartenance canadienne que signifier une ouverture nord-américaine.

Contrairement aux ICF, chez qui la langue et l'ethnie se conjuguent pour donner un profil du nationalisme, les ICA présentent une configuration peu contrastée de leur sentiment d'appartenance. Les traits combinés mettant en relation les variables précédentes avec les différentes variables du questionnaire se sont d'ailleurs avérés dans la plupart des cas non significatifs. Il serait intéressant, au cours de recherches ultérieures, d'approfondir ce sentiment d'appartenance des ICA québécois et notamment de vérifier la signification de leur faible niveau d'orientation ethnique.

Tableau IX-23 Typologie des ICA selon la société d'appartenance

	Nombre	%
Canadiens et Canadiens anglais ou Canadiens anglais et Canadiens	78	28,0
Canadiens et anglophones ou Anglophones et Canadiens	109	39,0
Canadiens et Nord-Américains ou Nord-Américains et Canadiens	92	33,0

## *2. Le sentiment nationaliste chez les ICF*

Par contre, au terme de ce chapitre, on peut dès maintenant vérifier de façon succincte dans quelle mesure les comportements et les attitudes des ICF varient en fonction de leur sentiment d'appartenance.

### *a. Appartenance et caractéristiques sociales*

En confrontant d'abord la typologie nationaliste aux coordonnées sociales des ingénieurs, on peut voir si l'attitude nationaliste a des racines qui viennent de certaines catégories sociales plutôt que d'autres, qu'il s'agisse de l'âge, de l'origine géographique ou sociale, ou d'autres variables.

Chez les ICF, le nationalisme semble être plus relié à l'âge qu'à l'origine sociale. En effet, si l'on isole les jeunes, on voit qu'ils représentent 83 % du groupe le plus nationaliste et seulement 57 % du groupe qui l'est le moins; par contre, si l'on isole ceux dont l'origine sociale est supérieure, qui sont plus nationalistes, les variations ne se situent qu'entre 47 et 33 %. Chez les jeunes, ceux d'origine inférieure sont un peu moins nationalistes que ceux d'origine supérieure; chez les vieux, ceux d'origine supérieure ont une répartition semblable à la moyenne, tandis que ceux d'origine inférieure sont beaucoup moins nationalistes.

Tableau IX-24 Âge et origine sociale des ICF classés par société d'appartenance

	Canadiens français et francophones	Canadiens français et Canadiens	Canadiens et Canadiens français ou Canadiens et francophones	Canadiens et Nord- Américains ou Nord- Américains et Canadiens
<i>Jeunes</i>				
Classe supérieure	34,0	24,7	23,1	16,7
Classe inférieure	49,1	43,3	43,1	41,7
<i>Vieux</i>				
Classe supérieure	13,2	20,6	18,5	16,7
Classe inférieure	3,8	11,3	15,4	25,0

L'appartenance à une classe sociale ne jouant pas autant que l'âge dans l'option nationaliste, les ICF d'origine inférieure ont tendance à l'être moins. Dans le chapitre consacré au travail et à la carrière, nous avons déjà montré que le type d'entreprise où ils travaillent varie beaucoup entre ICA et ICF. Chez ces derniers, certaines variations se manifestent selon le nationalisme : ceux du type « Canadien français du Canada » sont surreprésentés dans la petite entreprise et surtout dans le gouvernement, et sous-représentés dans la grande entreprise; par contre, les moins nationalistes se retrouvent peu au gouvernement, mais beaucoup dans la petite et la grande entreprises (tableau n° IX-25). De même, la langue parlée au travail semble en relation avec le nationalisme. Le nationalisme est plus fréquent chez les ICF qui travaillent surtout en français.

Tableau IX-25 Type d'entreprise et société d'appartenance des ICF

	Canadiens français et francophones	Canadiens français et Canadiens	Canadiens et Canadiens français ou Canadiens et francophones	Canadiens et Nord- Américains ou Nord- Américains et Canadiens
Petite entreprise	32,0	39,8	31,7	37,5
Grande entreprise				
privée	30,0	14,8	34,9	37,5
Services publics	38,0	45,5	33,3	25,0

*b. Société d'appartenance et vie économique*

L'importance accordée aux problèmes économiques du Québec (question 104), par opposition à l'éducation ou aux relations entre les deux nations, constitue un indice de l'urgence du développement industriel. Cette importance ne varie pas de façon concomitante avec le nationalisme, mais elle est deux fois plus grande pour les ICF (34,1 %) que pour les ICA (16,4 %); chez les ICF, les « francophones » n'attachent pas à ces questions plus d'importance que les « Canadiens d'Amérique du Nord » (30 %). Ce sont les « Canadiens français du Canada » qui accordent le plus d'intérêt à ces questions (41,1 %).

Quant aux objectifs de la croissance, s'il y a peu d'écart entre les deux groupes ethniques, les choix diffèrent selon l'intensité du sentiment nationaliste. En effet, si le choix de l'objectif : « industrialiser la province » augmente avec le nationalisme des ICF, la relation se trouve inversée lorsqu'il s'agit d'augmenter la productivité.

Si l'on considère maintenant les moyens de croissance, les ingénieurs préfèrent en majorité un régime démocratique à un régime autoritaire pour assurer le développement économique et social du Québec, cette tendance étant plus accentuée chez les ICA (86 % contre 70 %), et le choix autoritaire augmentant chez les ICF avec le nationalisme (16,7 % contre 29,6 %).

Quant à l'opposition protectionnisme/libre-échange, la majorité, dans les deux groupes, choisissent le libre-échange, mais les ICA dans une plus grande proportion que les ICF (82,5 % contre 52 %); ceux-ci sont d'autant plus protectionnistes qu'ils sont nationalistes, à l'exception des « Canadiens français du Canada », qui sont plus protectionnistes que les « Canadiens français francophones » (56,5 % contre 49,1 %). Les deux groupes — ICA et ICF — donnent priorité au Québec comme source de capitaux et font passer le Canada bien avant les États-Unis comme second choix, mais, chez les seconds, l'importance de ces choix augmente avec le nationalisme : pour le Québec, de 47,6 à 84,9 %, et pour le Canada, de 50 à 66 %.

Quant au type d'entreprise privilégié, les ICA donnent leur préférence à l'entreprise privée (77 %) alors que les ICF la donnent à l'entreprise mixte (50,1 %). Chez ces derniers, la préférence pour l'entreprise mixte ou publique augmente avec le nationalisme, la relation étant inverse concernant l'entreprise privée.

Le sentiment d'appartenance à une société canadienne-française et francophone semble donc accentuer certaines attitudes des ICF à l'égard de la vie économique : plus autoritaires, plus autarciques en matière commerciale, recourant plus volontiers au Québec comme source de capitaux et à l'entreprise mixte comme régime industriel valorisé, et favorisant une croissance plus rapide.

*c. Appartenance et identification culturelle*

Nous avons déjà montré que les ICA et les ICF ont des orientations différentes quant à plusieurs phénomènes touchant l'identification



culturelle. À l'intérieur du groupe des ICF, ces différences sont encore accentuées par le sentiment d'appartenance. Par exemple, 66,8 % des ICF croient que l'anglais est indispensable comme langue technique, mais cette conviction passe de 72,2 à 44,4 % à mesure que le sentiment d'appartenance devient plus nationaliste.

On peut observer des variations analogues dans les phénomènes de consommation culturelle. Si les ICF sont sollicités par un univers anglo-saxon, les plus nationalistes d'entre eux se montrent davantage récalcitrants à cette influence : ils suivent avec moins d'assiduité les émissions de radio ou de télévision en langue anglaise. La proportion des ICF qui lisent des quotidiens en français augmente aussi avec le nationalisme (de 41,7 à 88,9 %); il en est de même pour les hebdomadaires (de 26,8 à 50 %).

Par contre, le nationalisme ne semble pas influencer les ICF lorsqu'il s'agit de leurs relations avec des amis de leur propre groupe ethnique. Quant au mariage qu'ils souhaitent pour leur fille, l'endogamie ethnique, plus forte chez les ICF, s'accroît parallèlement au nationalisme et, lorsqu'ils ont le choix entre ethnies et professions, les plus nationalistes privilégient l'ethnie dans une proportion de 60,4 % contre 34,8 % chez les moins nationalistes.

Tableau IX-26 Société d'appartenance et endogamie ethnique ou professionnelle

	Canadiens français et francophones	Canadiens français du Canada	Canadiens et Canadiens français	Canadiens et Nord- Américains
Privilégient l'ethnie	60,4	62,5	37,7	34,8
Privilégient la profession	39,6	37,5	62,3	65,2

Comme leurs collègues ICA, d'ailleurs, les ICF opèrent une discrimination plus grande en faveur des facteurs religieux qu'en faveur de l'ethnie. Celle-ci prend d'autant plus d'importance que l'on a affaire à des ingénieurs plus nationalistes (de 13,6 à 26,4 %) (tableau n° IX-27).

On retrouve encore l'influence du nationalisme dans les questions ayant trait aux pays les plus valorisés. Les ICF qui se définissent d'abord comme Canadiens français et francophones manifestent des préférences plus marquées pour la France. De même, la majorité des ICF (66,6 %) préfèrent que leurs enfants soient éduqués entièrement dans leur propre langue, cette tendance augmentant avec le nationalisme (de 47,8 à 90 %).

Tableau IX-27 Société d'appartenance et endogamie ethnique ou religieuse

	Canadiens français et francophones	Canadiens français du Canada	Canadiens et Canadiens français	Canadiens et Nord- Américains
Privilégient l'ethnie	26,4	22,8	6,3	13,6
Privilégient la religion	73,6	77,2	93,7	86,4

Le type de société d'appartenance privilégié par les ICF, pris comme indice d'une orientation nationaliste, s'avère donc un modèle fécond pour interpréter la plupart des questions reliées à l'identification culturelle.

#### *Conclusion*

Le thème de l'identité culturelle fait apparaître des différences sensibles entre les deux groupes observés. À ces différences contrastées quant à l'usage de la langue et les rapports sociaux, semblent correspondre des stéréotypes qu'un groupe entretient à l'égard de l'autre, qui trouvent leur source ou se prolongent dans des définitions différentes des sociétés d'appartenance et aboutissent à l'expression d'un éventail d'identifications nationales beaucoup plus ouvert chez les ICF que chez les ICA. L'ensemble de ces attitudes peuvent être interprétées comme le système de défense d'un groupe minoritaire. Le renforcement du nationalisme canadien-français est l'expression d'une défense de l'ethnie française au sein du Canada anglophone, alors que la recherche du biculturalisme est l'expression de défense du groupe canadien-anglais minoritaire au Québec.

En effet, les ICF souhaitent que l'enseignement de leurs enfants se fasse en français alors que les ICA valorisent l'enseignement bilingue; de même, ils souhaitent que leurs enfants restent dans un milieu scolaire socialement homogène alors que les ICA favorisent la rencontre de groupes divers, les uns craignant l'assimilation et les autres la ségrégation.

L'obligation d'utiliser la langue de l'autre groupe, qui est une réalité quotidienne pour la majorité des ICF, s'impose de façon beaucoup moins fréquente pour les ICA; elle suit en outre une ligne de clivage hiérarchique, introduisant dans un modèle de domination linguistique un modèle de pouvoir industriel que les ICF de notre échantillon ne vivent cependant pas tous quotidiennement, puisqu'une minorité d'entre eux seulement se trouvent dans les grandes entreprises privées où les ICA dominent. Rien d'étonnant, donc, si ces derniers estiment d'une manière presque unanime (92,1 %) que l'anglais sera toujours indispensable, alors que les ICF ne sont qu'une simple



majorité (66,1 %) à partager cette opinion. Rien d'étonnant, non plus, si les ICF ont accès beaucoup plus souvent que les ICA à une consommation culturelle (télévision, radio) dans l'autre langue, puisqu'ils sont conduits par la pression du marché économique à pratiquer celle-ci.

Si les ICF admettent très logiquement que le fait de ne connaître que le français constitue pour eux, en raison de la structure des pouvoirs industriels, un obstacle à la réussite, il est peut-être plus étonnant de constater que, dans une proportion presque aussi élevée, les ICA estiment que la connaissance de la seule langue anglaise ou, si l'on veut, l'ignorance du français, entraîne pour eux la même conséquence. Ici apparaîtrait cette conscience des minorités qui les pousse à préconiser l'enseignement bilingue pour leurs enfants, alors que c'est l'unilinguisme qui constitue le système de défense des ICF.

Ces clivages, ces oppositions au niveau culturel, engendrent des stéréotypes; c'est toute la personnalité de l'autre qui est affectée par ces caractéristiques, reflets d'une situation et d'une opposition : les ICA sous-estiment les qualités de travail des ICF, les ICF reprochent aux ICA un manque de patriotisme ou un refus du biculturalisme.

De plus, les pôles de références extérieurs manifestent des attaches avec la nation mère, c'est-à-dire la France pour les ICF et l'Angleterre pour les ICA, plus fréquentes chez les premiers, moins prononcées chez les seconds, lesquels se sentiraient plus fortement attirés par l'attrait exercé sur le plan culturel par les États-Unis où, en revanche, les ICF émigreraient plus volontiers.

L'ensemble de ces attitudes conduit à un renforcement plus grand des valeurs religieuses ou ethniques chez les ICF, ainsi qu'en témoignent leurs préférences dans les relations sociales intimes (mariage de leur fille). Elles aboutissent enfin à deux types d'identification nationale : chez les ICF apparaît très clairement un nationalisme canadien-français, alors que la dimension ethnique ne se manifeste pas chez les ICA qui se reconnaissent avant tout canadiens, sans éprouver le besoin, comme les ICF, d'ajouter un qualificatif ethnique.



Après cette revue générale des attitudes propres à chaque groupe ethnique, il nous a paru important de vérifier deux séries d'hypothèses : l'une se rapportant à l'influence de l'origine sociale sur le comportement, l'autre, aux différences que l'on peut constater entre ceux qui appartiennent à la jeune génération d'ingénieurs et ceux qui exercent depuis plus de 15 ans.

Cette tentative d'isoler ces deux types d'influence semble d'autant plus importante qu'ICA et ICF ne sont pas également représentés au sein des différents groupes d'origine et d'âge. En effet, ainsi que nous l'avons constaté, les premiers sont légèrement surreprésentés parmi ceux qui viennent d'un milieu social élevé (père professionnel ou semi-professionnel), et 72 % des seconds ont moins de 40 ans contre 53 % seulement chez les ICA.

Or, si l'origine sociale et l'appartenance à un groupe d'âge modifient les attitudes, les différences observées entre les deux groupes ethniques pourraient bien résulter de leur représentation disproportionnée, quant à l'origine, au sein d'une classe ou d'un groupe d'âge plutôt que de leur origine ethnique.

Le chapitre qui suit tentera donc de déterminer si les relations établies précédemment demeurent vraies quand on contrôle la classe et l'âge : les différences entre ICA et ICF s'atténuent-elles lorsqu'on passe d'une classe d'origine à une autre ? Par ailleurs, lequel de ces deux facteurs joue le rôle le plus important dans l'orientation du comportement ?

## *A. Les classes et les générations*

### *1. L'âge et l'origine sociale*

Un premier ensemble de coups de sonde a été lancé à l'aide d'un indice qui divise la population selon l'âge et l'origine sociale. Deux groupes d'âge ont été isolés : la génération des moins de 40 ans et

celle de 40 ans et plus, les ingénieurs étant classés, au sein de chaque groupe d'âge, selon leur origine : élevée, lorsque leur père était professionnel ou semi-professionnel; basse, sur une échelle de stratification, lorsqu'il était petit col blanc ou ouvrier. Deux ensembles d'attitudes nous intéressaient particulièrement : d'une part, celles ayant trait à la carrière et la mobilité; d'autre part, celles se rapportant aux classes sociales.

*a. Les attitudes face à la carrière*

Nous avons vu précédemment que les ICA ont, plus que les ICF, tendance à privilégier l'administration comme type de carrière, par opposition à la technique. En fait, lorsqu'on contrôle l'âge et l'origine, il apparaît que, chez les ICF, le groupe des jeunes d'origine basse, par ailleurs le plus important de l'échantillon, est le seul pour lequel cette hypothèse se vérifie (tableau n° X-1). Les autres groupes valorisent l'administration autant, sinon plus, que les ICA d'âge et d'origine correspondants. Il faut noter cependant que, sauf chez les jeunes ICA, les ingénieurs d'origine plus élevée valorisent davantage l'administration que ceux d'origine plus basse.

Tableau X-1 Préférence pour une carrière technique ou administrative, selon l'âge et l'origine sociale

	ICF				ICA			
	Moins de 40 ans		40 ans et plus		Moins de 40 ans		40 ans et plus	
	OE*	OB*	OE	OB	OE	OB	OE	OB
Carrière technique	50,0	61,7	34,9	48,4	43,2	39,7	40,0	50,0
Carrière adminis- trative	50,0	38,3	65,1	51,6	56,8	60,3	60,0	50,0
Echantillon	72	124	45	32	76	66	90	42

ICF, âge :  $P = 0,02$ ; origine :  $P = 0,02$ . ICA, âge : non sign.; origine : non sign.

\* OE : origine élevée; OB : origine basse.

Dans ce chapitre, la technique du  $\chi^2$  multiple a été utilisée systématiquement, ce qui nous a permis d'isoler l'influence de l'âge et celle de l'origine sociale dans des tableaux tri-dimensionnels. Pour une explication plus détaillée de cette méthode, voir J. P. Sutcliffe, « A General Method of Analysis of Frequency Rate for Multiple Classification Designs », dans *Psychological Bulletin*, vol. 54, n° 2, 1957;

H. O. Lancaster, « The Deviation and Partition of  $\chi^2$  in Certain Discrete Distributions », dans *Biometrika*, vol. 36, 1949.

Pour ce qui est de l'importance accordée à l'avancement ou au type de travail, comme raison motivant le choix de l'administration ou de la technique, il semble que les jeunes, tant chez les ICA que chez les ICF, valorisent davantage l'avancement que leurs aînés (tableau n° X-2). Cependant, le phénomène d'appartenance à une classe élevée produit, chez les ICF de plus de 40 ans, les mêmes résultats que chez leurs cadets, leurs aspirations à la mobilité se révélant en effet aussi manifestes.

Tableau X-2 Motif de ce choix, selon l'âge et l'origine sociale

	ICF				ICA			
	Moins de 40 ans		40 ans et plus		Moins de 40 ans		40 ans et plus	
	OE*	OB*	OE	OB	OE	OB	OE	OB
Travail	64,1	67,9	57,1	78,6	56,9	56,6	73,6	73,7
Avancement	35,9	32,1	42,9	21,4	43,1	43,4	26,4	26,3

ICF, âge : non sign.; origine : non sign. ICA, âge :  $P = 0,01$ ; origine : non sign.

\* OE : origine élevée; OB : origine basse.

Un autre indice peut nous éclairer au sujet des aspirations à la mobilité. Nous demandions aux ingénieurs s'ils prévoyaient accéder à un poste un peu plus élevé, à un poste nettement supérieur, ou à la direction d'une entreprise (tableau n° X-3). Ici, comme à la question précédente, les moins de 40 ans envisagent des promotions plus importantes; un groupe paraît cependant particulièrement orienté vers la réussite, celui des jeunes ICA d'origine élevée, 31,5 % d'entre eux escomptant parvenir à des postes de direction alors que jamais plus de 19 % des autres groupes n'envisagent une telle ascension. Par ailleurs, là aussi, une origine élevée compense chez les ICF l'influence de l'âge. Toujours en rapport avec la mobilité, les jeunes accepteraient plus volontiers de quitter Montréal, si une promotion leur était offerte ailleurs au Québec, surtout chez les ICF (tableau n° X-4).

Chez les jeunes ICF, cette orientation plus marquée vers la mobilité dans la carrière se double d'une perception moins fréquente de la nécessité de l'anglais comme langue technique dans l'entreprise. En effet, alors que les ICF de plus de 40 ans pensent, dans une proportion de 84 % pour ceux d'origine supérieure et de 78 % pour ceux

d'origine inférieure (différence d'âge,  $P = 0,01$ ; différence d'origine, non significative), que « l'utilisation de l'anglais comme langue technique dans l'industrie sera toujours indispensable au Québec », ces pourcentages tombent respectivement à 57 et 62 % chez les jeunes ICF, mais les ICA sont presque unanimes (entre 90 et 95 %) à affirmer cette nécessité (les différences d'âge et d'origine étant ici non significatives). Il semble donc que le facteur âge joue, au

Tableau X-3 Promotion prévue, selon l'âge et l'origine sociale

	ICF				ICA			
	Moins de 40 ans		40 ans et plus		Moins de 40 ans		40 ans et plus	
	OE*	OB*	OE	OB	OE	OB	OE	OB
Poste un peu plus élevé	46,4	39,5	46,9	60,0	17,8	20,6	53,1	61,1
Poste nettement supérieur ou de direction	53,6	60,5	54,0	40,0	82,2	79,3	46,9	38,9

ICF, âge : non sign.; origine : non sign. ICA, âge :  $P = 0,001$ ;  
origine : non sign.

\* OE : origine élevée; OB : origine basse.

Tableau X-4 Attitude à l'égard d'une promotion hors de Montréal,  
selon l'âge et l'origine sociale

	ICF				ICA			
	Moins de 40 ans		40 ans et plus		Moins de 40 ans		40 ans et plus	
	OE*	OB*	OE	OB	OE	OB	OE	OB
Accepteraient	69,9	82,1	45,5	53,1	76,4	73,0	69,8	61,9
Refuseraient	30,4	17,9	54,5	46,9	23,6	27,0	30,2	38,1

ICF, âge :  $P = 0,001$ ; origine :  $P = 0,01$ . ICA, âge : non sign.;  
origine : non sign.

\* OE : origine élevée; OB : origine basse.



niveau de la carrière, un rôle plus important que le facteur origine sociale.

*b. Les attitudes à l'égard de la classe ouvrière*

Les ICF accordent à la classe ouvrière une place beaucoup plus importante dans le développement de l'économie du Québec que les ICA, sauf dans le cas des ingénieurs de 40 ans et plus et d'origine basse (tableau n° X-5). Chez les ICA, c'est la classe moyenne qui est privilégiée, surtout par les ingénieurs d'origine sociale élevée, dont les deux tiers, indépendamment de leur âge, lui accordent la première place. Chez les autres, ce choix est moins généralisé (48 et 57 %), mais il n'en demeure pas moins le plus fréquent. Par ailleurs, très peu d'importance est accordée à la classe ouvrière par les ICA, si ce n'est par les plus de 40 ans d'origine basse (tableau n° X-6).

Tableau X-5 Perception par les ICF de la contribution des classes sociales à la croissance économique du Québec, selon l'âge et l'origine sociale

	ICF			
	Moins de 40 ans		40 ans et plus	
	OE*	OB*	OE	OB
Classe ouvrière	30,6	34,2	28,6	19,4
Classe moyenne	30,6	34,2	31,0	29,0
Classe bourgeoise	38,9	31,7	40,5	51,6

Âge : non sign.; origine : non sign.

\* OE : origine élevée; OB : origine basse.

Tableau X-6 Perception par les ICA de la contribution des classes sociales à la croissance économique du Québec, selon l'âge et l'origine sociale

	ICA			
	Moins de 40 ans		40 ans et plus	
	OE*	OB*	OE	OB
Classe ouvrière	14,9	18,8	7,2	27,5
Classe moyenne	66,2	48,4	66,3	57,5
Classe bourgeoise	18,9	32,8	26,5	15,0

Âge : non sign.; origine : non sign.

\* OE : origine élevée; OB : origine basse.

Cette attitude favorable des ICF à l'égard de la classe ouvrière se traduit à d'autres niveaux, surtout chez les jeunes qui, en cas de grève, se rangent en nombre à peu près égal, quelle que soit leur classe d'origine, du côté ouvrier et du côté patronal. En fait, ils optent pour les ouvriers près de deux fois plus souvent que les jeunes ICA (tableau n° X-7).

Les ICF qui ont dépassé 40 ans sont légèrement plus nombreux que les ICA du même âge à se ranger du côté des ouvriers (19 et 25 % contre 14,3 et 16,7 %, selon que l'origine est élevée ou basse), bien que leur prise de position en faveur des patrons soit aussi massive que celle des ICA (50 % en moyenne contre 55,6 %) et beaucoup plus massive que celle des jeunes ICF.

Cependant, bien que les deux groupes croient, dans leur majorité, en une égalisation progressive des membres de la société, les ICF perçoivent sensiblement plus souvent que les ICA une accentuation des écarts économiques entre les individus (tableau n° X-8). Bien plus, les ICF sont pour une grande part (presque la moitié) en faveur du maintien de ces écarts, surtout s'ils sont d'origine sociale élevée. Seuls les jeunes d'origine basse optent de façon très nette pour une société égalitaire (tableau n° X-9). Chez les ICA, il y a unanimité à ce sujet : 75 % d'entre eux, quels que soient leur âge et leur origine sociale, sont en faveur d'une société plus égalitaire.

Tableau X-7 Attitude à l'égard des grèves, selon l'âge et l'origine sociale

	ICF				ICA			
	Moins de 40 ans		40 ans et plus		Moins de 40 ans		40 ans et plus	
	OE*	OB*	OE	OB	OE	OB	OE	OB
Impliqué du côté :								
patronal	28,4	32,7	19,0	25,0	17,2	16,7	14,3	16,7
ouvrier	38,8	28,3	50,0	50,0	51,6	53,3	55,7	55,6
Pas impliqué	32,8	38,9	31,0	25,0	31,3	30,0	30,0	27,8

ICF, âge :  $P = 0,05$ ; origine : non sign. ICA, âge : non sign.;  
origine : non sign.

\* OE : origine élevée; OB : origine basse.

Tableau X-8 Perception de la structure sociale, selon l'âge et l'origine sociale

	ICF				ICA			
	Moins de 40 ans		40 ans et plus		Moins de 40 ans		40 ans et plus	
	OE*	OB*	OE	OB	OE	OB	OE	OB
S'élargit	43,5	39,7	34,9	25,8	17,6	12,1	5,7	7,7
Se réduit	56,5	60,3	65,1	74,2	82,4	87,9	94,3	92,3

\* OE : origine élevée; OB : origine basse.

Tableau X-9 Attitude à l'égard de la structure sociale, selon l'âge et l'origine sociale

	ICF				ICA			
	Moins de 40 ans		40 ans et plus		Moins de 40 ans		40 ans et plus	
	OE*	OB*	OE	OB	OE	OB	OE	OB
Élargissement des écarts	47,8	28,8	47,6	43,3	23,4	24,6	22,4	23,7
Réduction des écarts	52,2	71,2	52,4	56,7	76,6	75,4	77,6	76,3

\* OE : origine élevée; OB : origine basse.

Le type de mariage que contractent les ICF constitue un autre indice d'un certain cloisonnement entre les classes que l'on constate chez eux. En effet, les fils de professionnels et de semi-professionnels épousent plus fréquemment que les autres des filles dont le père occupe une situation semblable à la leur (55,5 % chez les jeunes, 67,5 % chez ceux qui ont 40 ans et plus), de même que les fils de petits cols blancs ou d'ouvriers épousent plus fréquemment que les autres des filles originaires de leur milieu (70,1 % chez les jeunes, 53,4 % chez ceux qui ont 40 ans et plus). Chez les ICA, on ne se préoccupe pas de l'origine, bien que les plus âgés aient tendance à épouser des filles de professionnels ou de semi-professionnels.

## *2. Le statut professionnel du père et du grand-père*

Pour pouvoir aller plus avant dans cette étude de l'influence de l'origine sociale, nous avons construit un nouvel indice qui, cette fois, tient compte non seulement du statut professionnel du père, mais aussi de celui du grand-père.

Ont été isolées, dans chaque groupe ethnique, trois catégories d'ingénieurs : à la première, « origine élevée », appartiennent ceux dont le père et le grand-père étaient professionnels ou semi-professionnels; à la seconde, « père mobile », ceux dont le grand-père était petit col blanc ou ouvrier mais le père professionnel ou semi-professionnel; à la troisième, « origine basse », ceux dont le père et le grand-père appartenaient aux catégories professionnelles inférieures : petits cols blancs ou ouvriers.

Nous mentionnons les trois pourcentages mais, dans les pages qui suivent, la comparaison sera établie principalement entre les attitudes des ingénieurs du troisième groupe et celles des ingénieurs des deux autres groupes. Cet indice devra être utilisé avec prudence, car près du quart des ICF et plus du tiers des ICA n'ont pas répondu à l'une ou l'autre des deux questions (concernant la profession du père et du grand-père) qui ont servi à sa construction. En d'autres termes, les résultats ne sont valables que si la portion de l'échantillon pour laquelle nous possédons des réponses dans chacune des classes d'origine a des attitudes représentatives de chaque groupe.

Cette réserve étant faite, il semble ressortir de notre étude que le groupe des ICA d'origine sociale inférieure est en fait celui qui se rapproche le plus du groupe canadien-français, et cela sur au moins trois plans qui nous intéressaient plus particulièrement : vie de travail et revendication sociale, autoritarisme, éthique.

### *a. La vie de travail et la revendication sociale*

Les ICF ont tendance à accorder une place particulièrement importante au travail et aux connaissances comme facteur de réussite, alors que les ICA insistent davantage sur le doigté. Or, les ICA d'origine sociale inférieure accordent moins d'importance au doigté que les autres ICA et comparativement plus d'importance au travail et aux connaissances (28 % contre 14 et 22 %, alors que 39 à 42 % des ICF donnent le premier rôle au travail).

Ces réponses pourraient constituer un indice des difficultés d'ordre social que l'ingénieur d'origine sociale inférieure doit surmonter pour accéder à sa profession, alors que pour l'ingénieur d'origine sociale supérieure, les difficultés se posent au niveau personnel : possède-t-il ou non suffisamment de talent ? Dans l'affirmative, peu de chose s'oppose à son succès. Pour l'ICF, de même que pour l'ICA d'origine inférieure, la barrière qui sépare les classes constitue un obstacle qu'il ne peut surmonter que par le travail.

Un glissement semblable des ICA d'origine sociale inférieure vers le groupe ICF peut être observé au niveau des attitudes quant à la

participation à la gestion, puisque 60,5 % d'entre eux estiment qu'elle est insuffisante contre respectivement 49 et 53 % chez les ICA et les ICF d'origine plus élevée. Ce sont donc ceux des ICA qui se rapprochent le plus des ICF, dont une proportion variant de 79 à 86 % se disent insatisfaits à ce sujet.

Une autre variable peut aussi constituer un indice d'un certain degré d'insatisfaction : il s'agit du désir d'être rémunéré d'après le rendement individuel et non d'après celui de l'entreprise ou par un salaire fixe. Le fait de favoriser un mode de rémunération selon le rendement individuel semblerait indiquer que les ingénieurs n'ont pas l'impression d'être rétribués selon la valeur du travail fourni. Alors qu'à peine 11 à 15,5 % des ICA d'origine sociale élevée optent pour ce type de rémunération, les ingénieurs d'origine basse lui donnent la faveur dans une proportion de 22 %. Quant aux ICF, ils s'y rallient dans une proportion de 30 à 46 %.

En fin de compte, les ICA d'origine sociale basse se placent loin devant les autres ingénieurs de leur groupe lorsqu'il s'agit d'accorder une importance à la classe ouvrière dans la croissance économique du Québec (30 % contre 15 et 5,5 %), adoptant en ceci une attitude comparable à celle des ICF qui, dans une proportion de 30 %, lui reconnaissent également un rôle de premier plan dans ce domaine.

Tableau X-10 Contribution des classes sociales au développement économique du Québec, selon l'origine sociale

	ICF			ICA		
	Origine élevée	Père mobile	Origine basse	Origine élevée	Père mobile	Origine basse
Classe ouvrière	28,0	29,4	31,4	5,5	14,8	30,2
Classe moyenne	30,0	31,4	35,2	74,0	59,3	48,8
Classe bourgeoise	42,0	39,2	33,3	20,5	25,9	20,9

b. L'autoritarisme

Les ICA d'origine sociale inférieure sont aussi ceux qui se rapprochent le plus du groupe canadien-français sur le plan de l'autoritarisme. Ce phénomène peut être observé sur trois points : type de régime préconisé, attitudes face au personnel subalterne, attitudes relatives à l'éducation des enfants.

Bien que cette opinion demeure minoritaire, les ICA d'origine sociale inférieure sont au moins deux fois plus nombreux que ceux issus d'un milieu socialement plus élevé (20 % contre 7 et 10 %) à penser qu'un régime autoritaire paraît préférable à un régime démocratique pour assurer le développement économique et social du Québec. Les



ICA d'origine sociale basse manifestent donc sur ce point un sentiment plus proche de celui des ICF, puisque ceux-ci favorisent un régime autoritaire dans 25 à 35 % des cas.

De concert avec le groupe de père mobile, les ICA d'origine basse manifestent d'autre part moins de tolérance à l'égard des employés subalternes et des ouvriers, car seulement 44 et 41 % d'entre eux sont respectivement portés à croire qu'il est possible d'obtenir de meilleurs résultats par un commandement tolérant, la proportion s'élevant à 56 % chez les ingénieurs d'origine sociale élevée. Chez les ICF, les pourcentages correspondants, qui varient entre 34 et 40 %, ont, une fois de plus, tendance à se rapprocher de ceux observés chez les ingénieurs dont le père, ou au moins le grand-père, était petit col blanc ou ouvrier.

Enfin, au niveau de la famille, les ICA d'origine sociale basse ont tendance à être légèrement plus sévères pour ce qui est des sorties de leurs filles, 27 % contre 21 et 23 % ne les autorisent qu'à partir de 17 ans ou plus, se rapprochant quelque peu sur ce point des ICF qui, dans une proportion de 51 à 62,5 %, ne les permettent pas avant cet âge.

Un autre indice semble marquer la même tendance : 26 % des ICA d'origine basse, comparativement à 21 et 19 % de ceux d'origine plus élevée, estiment que le respect de l'autorité est la valeur la plus importante à inculquer à un enfant pour le préparer à la vie, les ICF partageant ce sentiment dans une proportion qui varie entre 33 et 45 %. Cette troisième manifestation d'une attitude autoritaire est certainement beaucoup moins probante que les deux autres, mais la tendance observée est cependant la même.

### *c. L'éthique*

L'éthique est le troisième terrain sur lequel se retrouvent les ICF et les ICA d'origine basse.

*Face à l'argent* — Les ICA d'origine sociale basse croient moins que les autres à l'épargne (38 % contre 48 à 54 %). Là encore ils se rapprochent des ICF, lesquels manifestent sur ce point une attitude négative beaucoup plus marquée, puisqu'à peine 15 à 23 % d'entre eux pensent qu'il est toujours possible d'épargner.

*Dans la vie sociale* — Les ICA d'origine sociale basse, de même que les ICF, participent peu à l'activité des clubs sociaux ou privés.

#### a) actifs dans un ou plusieurs clubs sociaux (question 90) :

ICA d'origine élevée	23,7 %
ICA père mobile	30,5 %
ICA d'origine basse	19,6 %
ICA de toutes origines	13 à 15 %

#### b) membres de deux clubs privés ou plus :

ICA d'origine élevée	13,2 %
ICA père mobile	20,3 %
ICA d'origine basse	6,5 %
ICA de toutes origines	2 à 8 %



## c) actifs dans au moins un club privé :

ICA d'origine élevée	28,9 %
ICA père mobile	32,2 %
ICA d'origine basse	21,7 %
ICA de toutes origines	8 à 17 %

*Dans la vie religieuse* — Les ICA protestants d'origine sociale basse pratiquent plus régulièrement que les autres (74 contre 58 et 59 %) atteignant un degré de pratique presque équivalent à celui des ICF (78 à 86 %).

C'est donc au niveau de la classe ouvrière, y compris les petits cols blancs, que les attitudes des ICA ont le plus tendance à ressembler à celles des ICF.

Il convient de noter que ces différentes observations ne signifient pas que les attitudes des ICA d'origine sociale peu élevée ressemblent plus à celles des ICF qu'à celles des ICA d'origine supérieure. Nous constatons simplement que, parmi les ICA, ceux de cette catégorie semblent plus enclins à avoir des attitudes comparables à celles des ICF.

Notons également que ce n'est pas des ICF d'origine ouvrière ou fils de petits cols blancs que les ICA de même origine se rapprochent le plus, mais, la plupart du temps, de ceux rattachés à la classe supérieure soit par le père, soit par le père et le grand-père.

On pourrait donc conclure que, chez les ICA, ce sont ceux d'origine basse qui, de par leurs attitudes, s'apparentent le plus aux ICF; d'autre part, que chez les ICF, ce sont ceux d'origine élevée qui, de par leurs attitudes, s'apparentent le plus aux ICA. (La démonstration n'est pas aussi probante ici.)

Cette brève étude de l'influence de l'origine sociale sur le comportement et les traits qui rapprochent le plus les ICA et les ICF selon leur origine, conduit à se demander ce qui, de l'origine et de l'appartenance à un groupe d'âge, a les répercussions les plus sensibles sur les attitudes des ingénieurs de l'un et l'autre groupe ethnique.

Or, il apparaît que, chez les ICF aussi bien que chez les ICA, les variations qui découlent de l'origine sont, dans la plupart des quelques cas étudiés, moins importantes que celles qui proviennent de l'appartenance à un groupe d'âge (sauf dans le cas de l'origine sociale du père de l'épouse). Il en est ainsi pour les promotions prévues (ICA, âge :  $P = 0,001$ ; origine : non sign.); l'utilisation de l'anglais comme langue technique (ICF, âge :  $P = 0,01$ ; origine : non sign.); les attitudes au moment d'une grève (ICF, âge :  $P = 0,01$ ; origine : non sign.); la tolérance envers les employés (ICF, âge :  $P = 0,01$ ; origine : non sign.; ICA, âge :  $P = 0,02$ ; origine : non sign.); la sévérité quant aux sorties des filles (ICF, âge :  $P = 0,02$ ; origine : non sign.). Dans certains autres cas, les différences ne sont pas significatives mais vont dans le même sens. Soulignons en outre que, dans la plupart des cas étudiés, les différences d'âge sont moins marquées chez les ICA que chez les ICF.

## B. L'ethnie et les générations

Il s'agit donc maintenant de procéder à une analyse systématique qui, en tenant compte de l'ethnie et de l'âge, nous permettra de déceler dans quelle mesure les différences attribuées jusqu'ici à l'ethnie seraient en fait des phénomènes relevant de l'âge. Si cette hypothèse s'avérait féconde, il faudrait se dégager d'une interprétation en termes ethnie pour souligner au contraire les rapprochements ou les écarts entre les générations.

Nous avons choisi 95 variables représentant l'essentiel des phénomènes rapportés dans l'enquête, et nous les avons réétudiées à l'aide de la technique du  $\chi^2$  multiple. L'analyse conjointe de l'âge et l'ethnie permet d'établir une typologie combinant quatre possibilités (tableau n° X-11).

Le modèle le plus fréquent est celui d'une différence ethnique seule (DES) que l'on retrouve dans 47,2 % des cas, alors que les différences d'âge seules (DAS) ne se retrouvent que dans 7,9 % des cas. Dans une proportion intermédiaire (21,3 %), il y a renforcement mutuel des différences de génération et d'ethnie (HEP). Quant aux autres cas, ceux d'homogénéité pure (HMP), on n'observe aucune différence significative reliée à l'âge ou à l'ethnie (23,6 %).

Ces résultats renforcent l'hypothèse de l'importance prépondérante des différences ethniques : ICA et ICF diffèrent entre eux dans 68,5 % des cas (HEP et DES), alors que jeunes et vieux ne s'opposent que dans 29,2 % des cas (HEP et DAS).

Tableau X-11 Typologie des variations interethniques et intergénérationnelles

	Variations interethniques	Variations inter- générationnelles	Nombre	%
Homogénéité pure (HMP)	N*	N	21	23,6
Différence ethnique seule (DES)	0,01** ou 0,001	N	42	47,2
Différence d'âge seule (DAS)	N	0,01 et 0,001	7	7,9
Hétérogénéité pure (HEP)	0,01 et 0,001	0,01 et 0,001	19	21,3
Total			89	100,0

\* Non sign.

\*\* Les résultats du  $\chi^2$  multiple ont été acceptés comme significatifs à partir du seuil de 0,01.

Bien que moins important, le poids des générations s'avère quand même une source d'interprétation valable dans près du tiers des variables. La suite de ce chapitre consistera à noter succinctement sur quels points ICA et ICF, jeunes et plus âgés, tendent à se ressembler ou à se différencier.

### *1. La mobilité sociale et professionnelle (tableau n° X-12)*

La grande majorité des variables liées à la mobilité intergénérationnelle et professionnelle présentent des différences significatives entre ICA et ICF. Outre les différences ethniques commentées antérieurement, la structure d'âge semble exercer une influence particulière dans le domaine des projets liés tant à la promotion qu'au désir de mobilité ou de partir à son compte, les jeunes manifestant plus d'optimisme mais en même temps plus d'impatience.

### *2. L'économique (tableau n° X-13)*

Au chapitre de la vie économique, l'enquête a révélé que ICA et ICF poursuivent des objectifs de croissance semblables et disposent d'un niveau d'information comparable, mais qu'ils favorisent le recours à des moyens différents pour stimuler et canaliser cette croissance.

L'âge seul ne semble avoir aucune influence sur les attitudes des ingénieurs face à la vie économique. Cependant, il se conjugue parfois à l'ethnie, et les jeunes adoptent dans ces cas des attitudes qui caractérisent les tendances des ICF : ils se montrent moins opposés aux nationalisations, plus favorables aux entreprises mixtes et publiques, et plus optimistes quant à leur participation aux bienfaits de la croissance.

### *3. Les classes sociales (tableau n° X-14)*

Même si elle comporte peu de cas, la section traitant des classes sociales, prolongement de la vie économique, se caractérise par un relief assez accusé. On n'y observe aucun cas d'homogénéité pure. Pour toutes les variables, on note au contraire des différences ethniques. Le groupe des jeunes renforce la tendance générale des ICF à se sentir plus menacés par des groupes dominants, de même que leur perception d'une structure sociale plus ouverte.

### *4. Les valeurs et l'industrialisation (tableau n° X-15)*

Cette opposition interethnique et intergénérationnelle n'est cependant pas constante. Quand on passe à des traits culturels et aux valeurs caractéristiques de la société industrielle, ICA et ICF, jeunes et moins jeunes, témoignent d'un consensus dans la moitié des cas. Le tableau n° X-15 indique la répartition des points d'affinité et des points de divergence.

Dans le domaine de la vie privée et de la carrière, ces tableaux confirment l'analyse déjà décrite, sauf sur deux points où l'on observe des différences d'âge : les jeunes mettent plus que leurs aînés

l'accent sur l'aspect divertissements et loisirs mais, par contre, insistent aussi plus qu'eux sur l'aspect créativité et devoir lié au travail.

Les résultats les plus marquants sont sans doute ceux qui traitent des valeurs culturelles liées à l'entreprise : sur neuf cas, on en retrouve huit d'homogénéité pure. L'entreprise tend à créer une image uniforme d'elle-même, au-delà des frontières de l'ethnie ou de la structure d'âge.

Dans l'ensemble des questions traitant des valeurs et de l'industrialisation, on retrouve très peu de différences attribuables à l'âge : 6 cas sur 30.

##### 5. *L'identification culturelle* (tableau n° X-16)

Il n'en est pas de même au niveau des phénomènes d'identification culturelle. Près de la moitié des variables étudiées dans ce secteur (7 sur 17) révèlent des phénomènes d'hétérogénéité pure. Contrairement au secteur précédent relatif aux valeurs liées à l'industrie, on note peu de cas d'homogénéité.

Très souvent, les attitudes des jeunes viennent renforcer la tendance majoritaire au sein de leur groupe ethnique. Et ce trait est particulièrement marqué chez les jeunes ICF qui désirent davantage l'éducation unilingue pour leurs enfants, estiment l'anglais moins indispensable dans le domaine technique, se réfèrent davantage à la France en matière de films et, finalement, se définissent davantage comme francophones.

##### 6. *Les écarts interethniques selon les générations*

Après avoir démontré que l'âge joue un rôle important dans 30 % des questions, on peut se demander dans quelle classe d'âge les écarts entre ICA et ICF sont les plus prononcés. Une estimation préliminaire a été établie : pour chacune des questions, la moyenne des écarts absolus entre ICA et ICF des deux classes d'âge a été calculée. Trois cas se présentaient : écarts équivalents entre les jeunes d'une part et les plus âgés d'autre part\*; écarts plus grands entre les jeunes qu'entre les plus âgés; écarts plus grands entre les plus âgés qu'entre les jeunes.

Dans les 99 cas où ce calcul a été possible, le résultat global suivant a été obtenu : similitude dans les écarts — 49,5 %; écarts plus prononcés chez les jeunes — 33,3 %; écarts plus prononcés chez les plus âgés — 17,2 %. Ainsi, dans la moitié des cas, l'écart entre les jeunes des deux ethnies n'est pas plus grand que celui observé entre leurs aînés. Toutefois, lorsqu'il y a écart, il se manifeste deux fois plus chez les jeunes que chez les plus âgés. Autrement dit, la disparité entre les deux groupes ethniques tend à s'accroître chez les jeunes.

---

\* Nous avons choisi le seuil de signification  $P = 0,05$ .



Tableau X-12 Mobilité en fonction de la typologie ethnique-âge

Question	Variation		Commentaires
	Ethnie	Âge	
31 Qualités personnelles contribuant à la réussite	0,001	N*	DES**
3a Nombre de frères	0,001	N	DES
64a Perception de classe	0,001	N	DES
46 Profession permettant une carrière intéressante	0,001	N	DES
29a Type d'entreprise préféré	0,001	N	DES
21b Promotion avec déplacement	0,001	N	DES
21c Promotion avec déplacement	0,001	N	DES
21d Attitude de l'épouse à l'égard d'un emploi hors de Montréal	0,001	N	DES
30 Facteurs contribuant à la réussite	0,001	N	DES
34 Attitude à l'égard de la participation à la gestion de l'entreprise	0,001	N	DES
33a Perception du rôle de l'ingénieur dans l'économie	0,01	N	DES
25 Attitude à l'égard du degré de spécialisation des ingénieurs	0,001	N	DES
17f Attitude rétrospective à l'égard d'une formation technique ou administrative	0,001	N	DES

Tableau X-12 (suite)

	Variation		Commentaires
	Ethnie	Âge	
99a Profession des trois meilleurs amis	N	0,001	DAS Les jeunes ingénieurs ont plus d'amis parmi les ingénieurs; les plus âgés, parmi les professionnels et semi-professionnels.
20 Promotion prévue dans l'entreprise	N	0,001	DAS Les jeunes ICA ont des aspirations plus élevées.
21a Attitude à l'égard d'une promotion avec déplacement	N	0,001	DAS Les jeunes des deux groupes partiraient plus souvent.
40 Qualités acquises, qualités à acquérir	N	0,001	DAS Les jeunes sont plus prêts à acquérir une nouvelle expérience.
14 Projet de partir à son compte	N	0,001	DAS Plus de projets chez les jeunes, plus d'essais chez leurs aînés.
11a Profession du père	0,001	0,001	HTP Les ICF sont d'origine plus modeste. Les jeunes, quelle que soit leur ethnie, sont également d'origine plus modeste.
39 Le salaire et le poste comme indices du mérite	0,001	0,01	HTP Les ICF y croient moins; les jeunes ICA y croient davantage.
10 Salaires des ingénieurs occupant des postes administratifs	0,01	0,001	HTP



Tableau X-12 (suite)

	Variation		Commentaires
	Ethnie	Âge	
3c Statut professionnel des frères	N	N	HMP
33b Aspirations à l'égard du rôle économique des ingénieurs	N	N	HMP
32 Motif du choix d'un emploi	NN	N	HMP

\* Non sign.  
\*\* Les cas de DES n'appellent pas de commentaires ici, car ils ont été analysés dans un chapitre antérieur.

Tableau X-13 Opinions sur la vie économique en fonction de la typologie ethnique-âge

	Variation		Commentaires
	Ethnie	Âge	
61 Autarcie ou commerce international	0,001	N*	DES**
63b Élever ou abaisser les barrières tarifaires	0,001	N	DES
55 Contribution des groupes professionnels à la croissance économique	0,001	N	DES
56 Institutions favorisant la croissance	0,001	N	DES
66 Contribution des classes sociales à la croissance économique	0,001	N	DES
57 Statut des entreprises favorables à la croissance	0,001	0,001	HTP
63a Maintien de l'entreprise privée ou nationalisation	0,001	0,001	HTP
28 Rapports entre la croissance économique et la position personnelle	0,001	0,001	HTP

Les ICA favorisent plus l'entreprise privée, et les ICF l'entreprise mixte et publique

Les ICF sont moins opposés à nationalisation. Les jeunes manifestent la même tendance.

Les ICF sont plus optimistes quant au bienfait, pour eux, de la croissance économique. Les jeunes manifestent le même optimisme.

Tableau X-13 (suite)

	Variation		Commentaires
	Ethnie	Âge	
60 Rythme de croissance souhaité	N	N	HMP
62 Objectifs de la croissance	N	N	HMP
53 Score total du test économique	N	N	HMP

\* Non sign.  
\*\* Les cas de DES n'appellent pas de commentaires ici, car ils ont été analysés dans un chapitre antérieur.

Tableau X-14 Classes sociales en fonction de la typologie ethnique-âge

	Variation		Commentaires
	Ethnie	Âge	
68 Attitude à l'égard des grèves	0,001	N*	DES**
64c Perception de catégories professionnelles ayant un statut supérieur	0,01	N	DES
64a Perception de catégories professionnelles ayant un statut égal	0,001	N	DES
52a Attitude à l'égard du syndicalisme des ingénieurs	0,001	N	DES
83b Jugement sur la structure socio-économique	0,001	N	DES
65b Perception des groupes ayant des intérêts opposés	0,001	0,001	HTP
83a Perception de la structure socio-économique	0,001	0,001	HTP

Les ICA ressentent plus d'oppositions des groupes idéologiques et des groupes sociaux dirigés; les ICF sont plus menacés par les groupes dirigeants et les professionnels. Les jeunes ICF sont plus menacés par les « dominants » et les jeunes ICA par les « idéologiques » et les « dominés ».

Les ICF croient davantage que la structure s'élargit, et les ICA, qu'elle se ferme. Les jeunes croient davantage que la structure s'élargit.

Tableau X-14 (suite)

	Variation		Commentaires
	Ethnie	Âge	
64b Perception de catégories professionnelles ayant un statut inférieur	0,001	0,01	HTP Les ICA marquent plus la distance avec les ouvriers, et les ICF avec les cols blancs. Les jeunes, sur-tout ICF, tendent à marquer plus de distance avec les cols blancs.

\* Non sign.

\*\* Les cas de DES n'appellent pas de commentaires ici, car ils ont été analysés dans un chapitre antérieur.

Tableau X-15 Perception des valeurs de la société industrielle en fonction de la typologie ethnico-âge

	Variation		Commentaires
	Ethnie	Âge	
<i>A. Vie privée et carrière</i>			
85 Durée des vacances	0,01	N*	DES**
92a Nombre idéal d'enfants	0,001	N	DES
71 Ce qui compte le plus dans la vie	0,01	N	DES
86 But des loisirs	N	0,01	DAS
37b Motifs du rejet de l'oisiveté	0,001	0,01	HTP
Les jeunes, ICF et ICA, mettent l'accent sur l'aspect divertissement. Les ICA invoquent la crainte de l'ennui, et les ICF la créativité et le devoir. Les jeunes insistent davantage sur la créativité et le devoir.			
37a Heureux ou malheureux sans travail	N	N	HMP
92b Nombre idéal d'enfants	N	N	HMP
<i>B. Entreprise</i>			
29a Type d'entreprise conseillé à un jeune ingénieur	0,001	N	DES
29b Motif du choix proposé	N	N	HMP
36 Poste préféré selon la dimension de l'entreprise	N	N	HMP
23 Conception de la direction d'entreprise	N	N	HMP



Commentaires

	Variation			Commentaires
	Ethnie	Âge		
9c	Utilisation des connaissances en génie	N	N	HMP
22	Type de formation optimale d'un directeur d'entreprise	N	N	HMP
45	Qualités requises d'un bon chef	N	N	HMP
42	Vie privée et promotion	N	N	HMP
44	Type d'entreprise favorisant la réalisation de ses possibilités	N	N	HMP
<i>C. Autorité et démocratie</i>				
9f	Nombre de personnes sous ses ordres	N	0,001	DAS
96	Valeurs à transmettre aux enfants	0,001	N	DES
91	Aptitudes des femmes à occuper des postes dans l'industrie	0,001	0.001	HTP
41	Rigidité ou souplesse dans l'industrie	N	N	HMP
<i>D. Économique</i>				
73	Type de placement privilégié	0,001	N	DES
77	Apport de la fortune	0,001	N	DES

Tableau X-15 (suite)

	Variation		Commentaires
	Ethnie	Âge	
72 Montant à partir duquel on peut épargner.	0,001	0,001	HTP
76 Mode d'acquisition des biens utiles	N	N	HMP
<i>E. Politique</i>			
54 Articles de journaux lus	0,001	N	DES
84 Attitude à l'égard de l'impôt	0,001	N	DES
69 Régime autoritaire ou démocratique	0,001	N	DES
51 Apports des groupes sociaux à la collectivité	0,001	N	DES
70 Importance de la vie privée d'un homme politique	0,001	0,001	HTP
80 Société égalitaire ou compétitive	N	N	HMP
			Les ICA croient possible d'épargner à partir d'un montant plus petit. La proportion des moins jeunes est plus grande aux extrêmes, i.e. parmi ceux qui pensent qu'il faut peu ou beaucoup pour épargner.
			Les ICA tiennent plus compte de la vie privée. Les jeunes tiennent moins compte de la vie privée.

\* Non sign.

\*\* Les cas de DES n'appellent pas de commentaires ici, car ils ont été analysés dans un chapitre antérieur.

Tableau X-16 Identification culturelle en fonction de la typologie ethnique-âge

	Variation		Âge	Commentaires
	Ethnie			
103 Pays où on aimerait vivre	0,001	N*	DES**	
19b Défauts attribués à l'autre groupe ethnique	0,01	N	DES	
19d Défauts attribués à son propre groupe ethnique	0,001	N	DES	
87 écoute de la télévision et de la radio dans l'autre langue	0,001	N	DES	
26b Étude en général hors du Québec	0,001	N	DES	
9a ICA et ICF, selon le type d'entre-				
prise	0,001	N	DES	
88 Lecture de journaux et de revues	0,001	N	DES	
93a Composition du milieu scolaire	0,001	N	DES	
93b Langue préférée pour les études des enfants	0,001	0,001	HTP	Les ICF désirent une éducation unilingue dans leur propre langue, alors que les ICA consentent plus volontiers à une éducation bilingue. Les jeunes ICF désirent une éducation unilingue. Les ICF ont plus d'amis parmi les C.F., et les ICA parmi les C.A.; les ICA ont par ailleurs plus d'amis d'une ethnie autre que la leur. Les jeunes ICF ont plus de relations d'endogroupes, et les jeunes ICA plus de relations d'exogroupes.
99b Ethnie des trois meilleurs amis	0,001	0,001	HTP	

Tableau X-16 (suite)

	Variation		Commentaires
	Ethnie	Âge	
99c Contacts sociaux avec des membres d'autres groupes ethniques	0,001	0,001	HTP Les ICA sont plus ouverts à des relations sociales interethniques. Les plus âgés recherchent davantage ce type de relations.
59 L'anglais indispensable comme langue technique	0,001	0,01	HTP Les ICA estiment l'anglais plus indispensable; les jeunes ICF l'estiment moins indispensable.
19a Qualités attribuées à l'autre groupe ethnique	0,001	0,01	HTP Les ICF valorisent les qualités de travail chez les ICA, et les jeunes ICF valorisent davantage les qualités de travail des ICA. Les plus âgés des ICF valorisent davantage les qualités personnelles des ICA. Les ICF préfèrent la France, et les ICA les États-Unis. Les jeunes ICF favorisent davantage la France et les jeunes ICA davantage les États-Unis et moins l'Angleterre que leurs aînés.
89 Pays d'origine des films préférés	0,001	0,01	HTP
102 Société d'appartenance	0,001	0,001	HTP Les ICA se définissent comme « canadiens » et les ICF comme « canadiens-français ». Les jeunes ICF sont plus francophones et moins « canadiens ».

Tableau X-16 (suite)

	Variation		Commentaires
	Ethnie	Âge	
48 L'unilinguisme, obstacle à la réussite	N	N	HMP
19c Qualités attribuées à son propre groupe ethnique	N	N	HMP

\* Non sign.

\*\* Les cas de DES n'appellent pas de commentaires ici, car ils ont été analysés dans un chapitre antérieur.

### *Conclusion*

Une première partie de ce dernier chapitre a établi par sondage dans le questionnaire que les écarts constatés entre les deux groupes étudiés étaient plus souvent attribuables à des différences d'âge qu'à des différences d'origine sociale; que les écarts dus à l'âge sont moins marqués chez les ICA que chez les ICF; enfin, que ce sont les ICA d'origine sociale inférieure qui manifestent les attitudes les plus proches de celles des ICF, surtout des ICF d'origine supérieure.

Si l'âge est un facteur plus discriminant des attitudes que les origines sociales, il restait à explorer plus systématiquement l'hypothèse suivante : l'appartenance à l'ethnie, quelle que soit la génération, introduit-elle dans la population des différenciations aussi fortes ou aussi fréquentes que l'appartenance à une génération, quel que soit le groupe ethnique ? Plus précisément, quels sont, parmi les domaines choisis aux fins de cette enquête, ceux dans lesquels les facteurs ethnie et génération exercent leur influence isolée ou conjuguée ?

Il ressort de façon marquante que ce sont les écarts dus au facteur ethnique qui l'emportent, avec une nette majorité, dans 68,5 % des cas, alors que les écarts attribuables à l'âge ne se manifestent que dans 29,2 % des cas. C'est dans l'identification culturelle, où jeunes et vieux sont proches à l'intérieur de chaque groupe ethnique, que cette dominance du facteur ethnique, qui apparaît dans la plupart des rubriques de l'enquête, s'exprime avec le plus de force.

Si ce qui touche à l'entreprise voit les écarts entre les ethnies et entre les générations s'estomper, par contre, jeunes ICF et jeunes ICA se rapprochent lorsqu'il s'agit d'estimer les moyens de la croissance économique : ils se montrent, les uns et les autres, plus favorables aux interventions de l'État dans la vie économique. Ils sont d'ailleurs plus optimistes et s'attendent à recueillir les fruits de la croissance économique.

Ainsi, des trois catégories privilégiées dans cette dernière analyse : origine sociale, génération et ethnie, c'est cette dernière qui se révèle la plus discriminante. L'origine sociale paraît moins forte et les jeunes générations, qui accusent les écarts plus que les anciennes, se découvrent toutefois davantage de similitudes au niveau de certains aspects de l'entreprise et de l'économie.







## ENQUETE AUPRES DES INGENIEURS - PROJET 006

NO. DE L'INTERVIEW

--	--	--	--	--	--

NOM DU REPONDANT \_\_\_\_\_

SON ADRESSE: \_\_\_\_\_

SON NO. DE TELEPHONE: \_\_\_\_\_

Heure du début de l'interview: \_\_\_\_\_

Heure de la fin de l'interview: \_\_\_\_\_

Durée totale: \_\_\_\_\_

Nom de l'interviewer: \_\_\_\_\_

Date: \_\_\_\_\_

REMARQUES: (si vous ne pouvez pas compléter l'interview tel que prévu,  
indiquez la ou les raisons de cette situation)

---

---

---

---

- 1 -

Attitudes à l'égard de la vie  
culturelle et économique des  
ingénieurs du grand Montréal.

Institut de recherche  
en Sciences Sociales

## QUESTIONNAIRE

	1	2	3	4	5	6
						1
1- a. Quelle est votre langue maternelle?	(7)					
Français	1					
Anglais	2					
Autre	3					
b. Quelle langue parlez-vous habituellement à la maison?	(8)					
Français	1					
Anglais	2					
Autre	3					
2- (L'interviewer n'écrit rien dans la colonne de codification)						
a. Dans quelle ville ou village avez-vous été élevé?	(9)			(10)		
Ville ou village:.....						
b. Comté:.....Province, pays..... (si en dehors du Québec)						
3- a. Combien avez-vous de frères et sœurs?	(11)					
0	1					
1	2					
2	3					
3	4					
4	5					
5	6					
6	7					
7	8					
8 +	9					
b. Combien sont nés avant vous?	(12)					
0	1					
1	2					
2	3					
3	4					
4	5					
5	6					
6	7					
7	8					
8 +	9					

- 2 -

c. (L'interviewer n'écrit rien dans la  
colonne de codification)

Quelles sont les occupations de vos frères et des  
maris de vos soeurs

(13)

(14)

Frères:

(Si commerçant ou  
industriel, deman-  
der le nombre d'em-  
ployés.)

Beaux-frères:

(Si commerçant ou  
industriel, de-  
mander le nombre  
d'employés).

4. Quel âge avez-vous?.....

(Inscrire l'âge dans les colonnes de codification)

(15)

(16)

5. Quel est votre état civil?

(17)

- Célibataire1
- (p. à Q-8)
- Marié2
- Veuf3
- Séparé ou divorcé4

6. a. A quel âge vous êtes-vous marié?

NE PAS LIRE

20 ans et moins1

21-222

23-243

25-264

27-285

29-306

31-327

33 ans et plus8

(18)

- 3 -

6 b. Quelle est l'origine ethnique de votre femme? (19)

Canadienne française	1
Canadienne anglaise	2
Anglaise	3
Française	4
Écossaise	5
Irlandaise	6
Autre	7
Laquelle?	

c. Combien d'enfants avez-vous? (20)

(Inscrire le nombre dans la colonne  
de codification) (Inscrire le chiffre 9 pour 9 et plus)

☐

7. Votre femme a-t-elle un emploi? (21)

Oui	1
Non	2

8.a. Quel cours avez-vous suivi avant votre cours d'ingénieur? (22)

11ème, 12ème, ou 13ème

en français	1
en anglais	2

Baccalauréat ès arts	
en français	3
en anglais	4

Autre	
en français	5
en anglais	6

b. Où avez-vous reçu votre diplôme d'ingénieur? (23)

NE PAS LIRE

Polytechnique	1
McGill	2
Ailleurs en français (au Canada)	3
Ailleurs en anglais (au Canada)	4
En dehors du Canada	5



- 4 -

- c. Dans quelle branche de génie vous êtes-vous spécialisé? (24)
- |               |   |
|---------------|---|
| chimique      | 1 |
| civil         | 2 |
| électrique    | 3 |
| physique      | 4 |
| géologique    | 5 |
| mécanique     | 6 |
| métallurgique | 7 |
| minier        | 8 |
| autres        | 9 |
- d. Avez-vous poursuivi des études post-universitaires? (25)
- |     |   |
|-----|---|
| Oui | 1 |
| Non | 2 |
- 9.a. Quelle est le genre d'entreprise pour laquelle vous travaillez? (26)
- |  |   |
|--|---|
| Bureau d'ingénieur-conseil                           | 1 |
| Petite entreprise (où il y a moins que 5 ingénieurs) | 2 |
| Grande entreprise (où il y a 5 ingénieurs et plus)   | 3 |
| Hydro-Québec   | 4 |
| Ville de Montréal                                    | 5 |
| Autres municipalités                                 | 6 |
| Gouvernement provincial                              | 7 |
| Gouvernement fédéral                                 | 8 |
| Régies, publiques (transports et communications)     | 9 |
| Institutions d'enseignement                          | 0 |
- b. Etes-vous salarié, associé ou seul à votre compte? (27)
- |                   |   |
|-------------------|---|
| salarié           | 1 |
| associé           | 2 |
| seul à son compte | 3 |
| les deux          | 4 |
- c. Votre travail fait-il appel à vos connaissances de génie? (28)
- |           |     |   |
|-----------|-----|---|
| (p. à d.) | Oui | - |
| (p. à e.) | Non | 1 |
- d. (Si oui), dans quelle proportion?
- | NE PAS LIRE |   |
|-------------|---|
| 100%        | 2 |
| 85 à 99%    | 3 |
| 70 à 84%    | 4 |
| 55 à 69%    | 5 |
| 40 à 54%    | 6 |
| 25 à 39%    | 7 |
| 10 à 24%    | 8 |
| 9 et moins  | 9 |

- 5 -

e. Travaillez-vous dans votre spécialité? (29)

Oui	1
Non	2
non réponse	3

f. (Ne pas écrire dans la colonne de codification)

Combien de personnes travaillent sous votre direction? (30)

g. Dans quel domaine travaillez-vous principalement? (31)

-administration générale	1
-construction, installation, érection	2
-projets	3
-relevés techniques	4
-production, entretien	5
-recherche	6
-achats et ventes; service et publicité	7
-enseignement	8
-contrôle, inspection, service de lab.	9
-autre	0

h. Dans quelle branche de l'industrie exercez-vous votre profession? (32)

NE PAS LIRE

chimique	1
civil (travaux publics)	2
électrique	3
physique	4
géologique	5
mécanique	6
métallurgique	7
minier	8
autre	9

1

C  
A  
R  
T  
E

10. Pourriez-vous situer quant à votre traitement annuel? Pourriez-vous m'indiquer le numéro qui correspond à la catégorie dans laquelle vous vous situez:

NE PAS LIRE

\$5,000 à 7,999	1
8,000 à 10,999	2
11,000 à 13,999	3
14,000 à 16,999	4
17,000 à 19,999	5
20,000 à 22,999	6
23,000 à 25,999	7
26,000 à 28,999	8
29,000 à 31,999	9
32,000 et plus	0

(33)

- 6 -

11. a (L'interviewer n'écrit rien dans la colonne de codification)

Quelle était l'occupation de votre père à l'âge que vous avez actuellement? (S'il était mort, sa dernière occupation)

(34)

---



---

- aa. Etait-il à son compte?      oui ☐ (p. à aaa.)  
    non ☐ (p. à b.)

aaa. (Si oui) combien avait-il d'employés? \_\_\_\_\_

- b. Jusqu'à quel niveau votre père a-t-il poursuivi ses études?

(35)

NE PAS LIRE	
Cours primaire (7ème ou moins)	1
8ème, 9ème et 10ème	2
11ème, 12ème, 13ème (technique, commercial, général, scientifique)	3
Baccalauréat	4
diplôme universitaire	5
autre	6
Ne sait pas	7

- c. Combien d'enfants y avait-il dans la famille de votre père qui ont vécu jusque vers 16 ans?

(36)

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9+	9

d. (L'interviewer ne doit rien écrire dans la colonne de codification)

Quelle était l'occupation de son père à lui au même âge? (S'il était mort, sa dernière occupation)

(37)

---



---

- dd. Etait-il à son compte?,      Oui ☐ (p. à ddd.)  
    Non ☐ (p. à e)

1
2
3
4
5
6

ddd. (Si oui), combien avait-il d'employés? \_\_\_\_\_

- 7 -

- e. (L'interviewer ne doit rien écrire dans la colonne de codification)  
 Quelle était l'occupation du père de votre mère, au même âge? (S'il était mort, sa dernière occupation) (38)
- \_\_\_\_\_
- \_\_\_\_\_
- ee. Etait-il à son compte? Oui (p. à eee.)  
 Non (p. à f. )
- eee. (Si oui), combien avait-il d'employés? \_\_\_\_\_
- f. (L'interviewer ne doit rien écrire dans la colonne de codification)  
 Quelle était l'occupation du père de votre femme, au même âge? (S'il était mort, sa dernière occupation) (39)
- \_\_\_\_\_
- \_\_\_\_\_
- ff. Etait-il à son compte? Oui (p. à fff.)  
 Non (p. à 12a.)
- fff. (Si oui), combien avait-il d'employés? \_\_\_\_\_
12. a. Dans quelle genre d'entreprise avez-vous travaillé immédiatement après votre cours d'ingénieur? (40)
- |   |   |
|---|---|
| bureau d'ingénieur-conseil                                  | 1 |
| petite entreprise privée (où il y a moins que 5 ingénieurs) | 2 |
| grande entreprise privée (où il y a plus de 5 ingénieurs)   | 3 |
| Hydro-Québec  | 4 |
| Ville de Montréal   | 5 |
| Autres municipalités  | 6 |
| Gouvernement provincial                                     | 7 |
| Gouvernement fédéral  | 8 |
| Régie publique (transports et communications)               | 9 |
| Instituts d'enseignement                                    | 0 |
- b. Dans quelle branche industrielle? NE PAS LIRE (41)
- |                         |   |
|-------------------------|---|
| Chimique                | 1 |
| Civil (travaux publics) | 2 |
| Electrique              | 3 |
| Physique                | 4 |
| Géologique              | 5 |
| Mécanique               | 6 |
| Métallurgique           | 7 |
| Minier                  | 8 |
| Autres                  | 9 |

- 8 -

c. (L'interviewer n'écrit rien dans la colonne de codification)

A quel endroit?

(avec précision, ville, village)...

(42)

d. Quelle âve aviez-vous?

(Inscrire l'âge dans les colonnes de codification)

(43) (44)

--	--

e. Quel était votre salaire annuel à ce moment-là?

(45)

NE PAS LIRE	
\$1,000 à 1,999	1
2,000 à 2,999	2
3,000 à 3,999	3
4,000 à 4,999	4
5,000 à 5,999	5
6,000 à 6,999	6
7,000 à 7,999	7
8,000 à 8,999	8
9,000 à 9,999	9

f. (L'interviewer n'écrit rien dans la colonne de codification)

Envisagiez-vous à ce moment-là une carrière technique ou administrative?

(46)

technique ☐  
 administrative ☐  
 les deux ☐  
 ne sait pas ☐

Pourquoi?

plutôt à cause du genre de travail ☐  
 plutôt à cause des changes d'avancement ☐  
 non-réponse ☐

13. a. Dans combien d'entreprises différentes avez-vous travaillé depuis que vous êtes ingénieur y compris celle où vous travaillez actuellement?

(47)

1 1  
 2 2  
 3 3  
 4 4  
 5 5  
 6+ 6

b. Avez-vous déjà travaillé dans une autre localité que Montréal? (Si oui, combien)?

(48)

oui - 1 localité 1  
 oui - 2 ou 3 localités 2  
 oui - 4 localités et plus 3  
 non 4

- 9 -

14. (L'interviewer n'écrit rien dans la colonne de codification pour la question 14a, b, c, d, e)

a. Avez-vous déjà songé partir à votre compte à partir du moment où vous avez commencé à exercer votre profession (49)

☐ Oui (p. à 14b)  
☐ Non (p. à 14e)

b. (Si oui), Avez-vous déjà essayé?

☐ Oui (p. à 14e)  
☐ Non (p. à 14e)

c. (Si oui) Avez-vous réussi?

☐ Oui (p. à 14e)  
☐ Non (p. à 14d)

d. (Si non), A quoi attribuez-vous cet insuccès? (50)

---



---



---

e. Combien d'ingénieurs avez-vous connus qui ont essayé de partir à leur compte? (51)

15. a. Comment avez-vous obtenu votre premier emploi? (52)

par recrutement à l'université	1
par des liens de famille	2
par vos relations	3
par une annonce	4
en présentant une demande	5
autrement	6
non-réponse	7

b. Lorsque vous avez changé d'emploi, comment avez-vous obtenu votre dernier emploi? (53)

NE PAS LIRE

N'a pas changé	1
Par des liens de famille	2
par une annonce	3
en vous associant avec d'autres	4
on est venu vous chercher	5
par des relations	6
en faisant une demande	7
en partant à votre compte	8
autrement	9



- 10 -

16. Lorsque vous avez choisi la profession d'ingénieur, (54)  
quelle a été l'attitude de votre père?

- satisfait 1
- indifférent 2
- déçu ou opposé 3
- décédé 4
- ne sait pas 5
- non-réponse 6

17. a. Auriez-vous aimé exercer une autre profession? (au moment (55)  
de prendre la profession d'ingénieur)

- oui -
- non 1
- ne sait pas 2

b. (Si oui), laquelle?

- NE PAS LIRE
- médecin 3
  - industriel ou homme d'affaires 4
  - autre activité professionnelle 5
  - activité artistique 6
  - autre activité scientifique 7
  - autre (laquelle)? 8

c. Pourquoi ne vous y êtes-vous pas engagé? (56)

- NE PAS LIRE
- exigences académiques ou 1
  - longueur des études 2
  - manque d'argent 3
  - difficulté d'y gagner sa 4
  - vie ou d'y réussir / 5
  - absence d'orientation 6
  - autre raison 7
  - laquelle? 8
  - non-réponse 7

d. Si vous pouviez retourner en arrière et recommencer votre (57)  
vie, choisiriez-vous une autre profession?

- oui -
- (p. à f.) non 1
- ne sait pas 2

e. (Si oui,) laquelle?

- NE PAS LIRE
- médecin 3
  - industriel ou homme d'affaires 4
  - autre activité professionnelle 5
  - activité artistique 6
  - autre activité scientifique 7
  - autre (laquelle) 8

2  
C  
A  
R  
T  
E

- 11 -

f. (L'interviewer n'écrit rien dans la colonne de codification.)

Si vous pouviez retourner en arrière, choisiriez-vous plutôt d'acquérir une formation technique ou administrative? (58)

- ☐ technique  
☐ plutôt administrative  
☐ ne sait pas

## g. Pourquoi?

- ☐ genre de travail  
☐ chances d'avancement  
☐ ne sait pas

## 18. a. Au travail, parlez-vous avec vos supérieurs plus souvent français ou anglais? (59)

- |                                  |   |      |   |
|----------------------------------|---|------|---|
| <u>Français</u>                  | { | 100% | 1 |
| (dans quelle proportion)         |   | 80%  | 2 |
|                                  |   | 60%  | 3 |
| ou                               |   |      |   |
| <u>Anglais</u>                   | { | 100% | 4 |
| (dans quelle proportion)         |   | 80%  | 5 |
|                                  |   | 60%  | 6 |
| autant français qu'anglais _____ |   |      | 7 |

## b. Au travail parlez-vous plus souvent français ou anglais avec vos égaux? (60)

- |                                  |   |      |   |
|----------------------------------|---|------|---|
| <u>Français</u>                  | { | 100% | 1 |
| (dans quelle proportion)         |   | 80%  | 2 |
|                                  |   | 60%  | 3 |
| ou                               |   |      |   |
| <u>Anglais</u>                   | { | 100% | 4 |
| (dans quelle proportion)         |   | 80%  | 5 |
|                                  |   | 60%  | 6 |
| autant français qu'anglais _____ |   |      | 7 |

## c. Au travail, parlez-vous plus souvent français ou anglais avec vos subordonnés? (61)

- |                                  |   |      |   |
|----------------------------------|---|------|---|
| <u>Français</u>                  | { | 100% | 1 |
| (dans quelle proportion)         |   | 80%  | 2 |
|                                  |   | 60%  | 3 |
| ou                               |   |      |   |
| <u>Anglais</u>                   | { | 100% | 4 |
| (dans quelle proportion)         |   | 80%  | 5 |
|                                  |   | 60%  | 6 |
| Autant français qu'anglais _____ |   |      | 7 |

19. a. (L'interviewer n'écrit rien dans la colonne de codification)

D'après vous quelles sont les qualités les plus caractéristiques des canadiens anglais? Veuillez en donner trois: (62) (63) (64)

1. \_\_\_\_\_  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_

- 12 -

- b. (L'interviewer n'écrit rien dans la colonne de  
codification)

Pourriez-vous maintenant donner trois défauts que vous  
considérez caractéristiques des Canadiens-anglais?

(65) (66) (67)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

- c. (L'interviewer n'écrit rien dans la colonne de  
codification)

Pourriez-vous donner trois qualités que vous considérez  
caractéristiques des Canadiens-français?

(68) (69) (70)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

- d. (L'interviewer n'écrit rien dans la colonne de  
codification)

Pourriez-vous donner trois défauts que vous considérez  
caractéristiques des Canadiens-français?

(71) (72) (73)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

20. Prévoyez-vous éventuellement:

Accéder à un poste un peu plus élevé que celui que vous  
occupez actuellement ou (s'il est associé ou à la tête de  
son entreprise) faire progresser normalement votre  
entreprise?

(74)

1

ou Accéder à un poste nettement supérieur à celui que vous  
occupez présentement ou (s'il est associé ou à la tête de  
son entreprise) faire progresser considérablement votre  
entreprise?

2

ou Accéder à la direction d'une entreprise

3

ou Croyez-vous être arrivé au sommet de votre carrière?

4

3  
C  
A  
R  
T  
E

- 13 -

21. Pour obtenir une promotion, accepteriez-vous de quitter Montréal
- A) si vous étiez envoyé ailleurs au Québec? (75)
- Oui 1  
Non 2  
3
- B) si vous étiez envoyé ailleurs au Canada mais à l'extérieur du Québec? (76)
- Oui 1  
Non 2  
3
- C) si vous étiez envoyé à l'extérieur du Canada? (77)
- Oui 1  
Non 2  
3
- D) (Si marié), votre femme accepterait-elle de quitter Montréal? (78)
- Oui 1  
Non 2  
3  
4
22. A votre avis, au poste de directeur-général d'une grande entreprise, vaut-il mieux avoir: quelqu'un qui a une formation (79)
- d'économiste 1  
d'ingénieur 2  
d'administrateur 3
- | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
|   |   |   |   |   | 2 |
23. Diriger une entreprise, est-ce plutôt: (7)
- l'art de produire 1  
ou  
l'art d'organiser 2
- 24.a. Où pensez-vous qu'il y ait le plus de chances de réussite pour un jeune ingénieur canadien-français? (8)
- au Québec 1  
ailleurs au Canada 2  
aux Etats-Unis 3  
ailleurs à l'étranger 4

- 14 -

b. Pourquoi croyez-vous qu'il y ait plus de chances de réussite à cet endroit? (9)

- les conditions d'emploi 1
- une économie plus prospère 2
- un plus grand besoin d'ingé- 3
- nieurs 4
- les chances de promotion 5
- autres raisons 5

25. Croyez-vous que la formation donnée aux ingénieurs en général, fait d'eux des ingénieurs trop spécialisés ou pas assez? (10)

- trop spécialisés 1
- pas assez 2
- juste assez 3
- 4

26. Si vous aviez à conseiller un étudiant qui veut aller poursuivre ses études supérieures à l'étranger, où lui conseilleriez-vous d'aller? (11)

A) Pour le génie.

- | NE PAS LIRE                |   |
|----------------------------|---|
| France                     | 1 |
| Angleterre                 | 2 |
| Etats-Unis                 | 3 |
| Ailleurs au Canada         | 4 |
| Ailleurs en Europe         | 5 |
| Ca dépend de la spécialité | 6 |

B) En général (12)

- | NE PAS LIRE                |   |
|----------------------------|---|
| France                     | 1 |
| Angleterre                 | 2 |
| Etats-Unis                 | 3 |
| Ailleurs au Canada         | 4 |
| Ailleurs en Europe         | 5 |
| Ca dépend de la spécialité | 6 |

27. Croyez-vous qu'un stage d'un an comme ouvrier dans une usine à la fin de son cours, aiderait un ingénieur à bien exercer sa profession ultérieurement? (13)

- oui 1
- non 2
- 3

- 15 -

28. Si le Québec se développe économiquement, croyez-vous que ce développement sera pour vous la source d'une amélioration sensible de votre position? (14)

- oui 1
- non 2
- ne sait pas 3

29. a. Dans quel genre d'entreprise suggéreriez-vous à un jeune ingénieur de travailler (15)

- petite entreprise privée 1
- fonction publique 2
- grande entreprise privée 3
- régie publique 4
- bureau d'ingénieurs-conseils 5
- indifférent 6
- non réponse 7

4  
e  
P  
R  
T  
E

b. Pourquoi? (Veuillez nommer deux raisons par ordre d'importance) (16) (17)

NE PAS LIRE

- possibilité de faire un travail créateur et exigeant 1 1
- l'atmosphère de travail 2 2
- les possibilités d'avancement et de salaire intéressant 3 3
- la possibilité d'acquérir une expérience précieuse 4 4
- la sécurité d'emploi 5 5
- les possibilités de s'établir à son compte 6 6
- fonds de pension 7 7
- autres raisons 8 8
- non réponse 9 9

5  
P  
A  
R  
T  
I  
E

30. A votre avis, quels sont les deux facteurs qui contribuent le plus à la réussite personnelle (rangez par ordre de préférence) (18) (19)  
(Inscrire le premier choix dans la colonne (18)  
" " 2ème " " " " (19)

NE PAS LIRE

- Qualités morales 1 1
- Travail 2 2
- Type d'éducation 3 3
- relations sociales 4 4
- Appartenance à un groupe ethnique 5 5
- Origine sociale 6 6
- Talent 7 7
- Ambition 8 8
- Non réponse 9 9



- 16 -

31. Selon vous, quelles sont les qualités personnelles les plus importantes pour réussir? (Rangez en 2 par ordre d'importance)

(Inscrire le premier choix dans la colonne (20))

(Inscrire le deuxième choix dans la colonne (21))

NE PAS LIRE	(20)	(21)
savoir s'y prendre avec les gens		
Capacité de prendre des décisions	1	1
Connaissances techniques	2	2
Persévérance et grande puissance de travail	3	3
Bon jugement	4	4
Esprit de décision	5	5
Autres qualités	6	6
Ne sait pas	7	7
	8	8

32. Si deux emplois vous étaient offerts, quelles seraient les deux raisons qui vous inciteraient à choisir un emploi plutôt qu'un autre (par ordre d'importance)?

(inscrire le 1er choix dans la colonne (22))

(inscrire le 2ème choix dans la colonne (23))

NE PAS LIRE	(22)	(23)
l'indépendance dans le travail		
les possibilités d'avancement	1	1
l'intérêt présenté par le travail	2	2
la renommée de l'entreprise	3	3
l'atmosphère de travail	4	4
le prestige de la fonction	5	5
autre raison	6	6
non réponse	7	7
	8	8

33. a. D'après vous, dans l'économie du Québec, les ingénieurs jouent-ils actuellement surtout un rôle de (2 choix par ordre d'importance).

(inscrire le 1er choix dans la colonne (24))

(inscrire le 2ème choix dans la colonne (25))

NE PAS LIRE	(24)	(25)
-Spécialiste dans une entreprise ou un bureau d'ingénieurs- ou/ conseils		
-Membre d'une corporation professionnelle/d'associations scientifiques	1	1
-Responsable de certaines décisions au sujet des politiques générales d'une entreprise	2	2
-Membre d'association à buts sociaux ou politiques	3	3
-Membre d'un syndicat	4	4
-Citoyen d'un Etat pouvant exercer ses droits	5	5
	6	6
	7	7

- 17 -

9  
C  
D  
R  
T  
E

- b. A votre avis, à quel titre devrait-il surtout jouer son rôle dans l'économie du Québec? (2 choix par ordre d'importance)  
(Inscrire le 1er choix dans la colonne (26))  
(Inscrire le second choix dans la colonne (27))

(26) (27)

NE PAS LIRE

- spécialiste dans une entreprise ou un bureau d'ingénieurs-conseils
- membre de corporations professionnelles ou d'associations scientifiques
- responsable de certaines décisions au sujet des politiques générales d'une entreprise
- membre d'une association à buts sociaux ou politiques
- membre d'un syndicat
- citoyen d'un Etat pouvant exercer ses droits
- ne sait pas

1	1
2	2
3	3
4	4
5	5
6	6
7	7

34. Croyez-vous que les ingénieurs devraient être associés plus étroitement à la gestion de l'entreprise qu'elle soit privée ou publique, ou croyez-vous qu'ils le sont suffisamment?

(28)

plus	1
suffisamment	2
non réponse	3

35. a. Accepteriez-vous une promotion importante qui réduirait le temps que vous pourriez consacrer à votre famille et qui exigerait que vous travailliez:

(29)

non	1
(Si oui, codez la dernière	2
catégorie où il répond	3
oui)	4
10 heures de plus par semaine	5
15 heures de plus par semaine	6
20 heures de plus par semaine	7
25 heures de plus par semaine	8
30 heures de plus par semaine	
35 heures de plus par semaine	
non réponse	

- b. Quelle moyenne d'heures diriez-vous que vous travaillez par semaine?

(30)

30	1
35	2
40	3
45	4
50	5
55	6
60	7
+ que 60 heures	8

- 18 -

10  
C  
A  
R  
T  
E

36.

Vous semble-t-il préférable d'être:

- à la tête d'une entreprise de dimension moyenne

ou

- d'être un cadre supérieur d'une grande entreprise?

- pas de différence

- non réponse

(31)

1

2

3

4
37.

a.

Certains disent qu'ils ne pourraient être heureux sans travailler, d'autres accepteraient immédiatement de quitter leur travail, s'ils en avaient les moyens. Laquelle de ces deux affirmations correspond le mieux à votre propre attitude:

heureux sans travail

malheureux sans travail

(32)

1

-
- b.

Pourquoi seriez-vous malheureux sans travail?

(1 seul choix)

NE PAS LIRE

- j'ai besoin d'activité et je m'ennuierais à ne rien faire

- l'homme se réalise davantage quand il crée quelque chose

- je me sentirais inutile

- l'homme n'est pas fait pour être oisif et doit travailler

- j'aime travailler

- non réponse

2

3

4

5

6

7

38.

a.

Dans votre travail, qu'est-ce qui vous plaît le plus?

(33)

b.

Qu'est-ce qui vous déplaît le plus?

(34)

39.

Croyez-vous qu'il est vrai, habituellement que le salaire et le poste d'un individu sont une bonne mesure de son mérite?

oui

non

ne sait pas

(35)

1

2

3

40.

De deux postes d'égale importance, l'un exigeant des qualités que vous considérez avoir, l'autre exigeant des qualités que vous considérez ne pas avoir mais qu'il vous serait avantageux d'acquérir par l'expérience, lequel choisiriez-vous?

qualités possédées

qualité à acquérir

non réponse

(36)

1

2

3

- 19 -

11 C A R T E	41.	De deux entreprises, laquelle fonctionne le mieux à votre avis: -celle où la direction définit clairement les fonctions et les responsabilités et les normes d'exécution dans l'organisation du travail  -celle où la direction tout en indiquant les lignes générales de cette organisation, laisse au personnel une plus grande liberté dans l'exécution du travail?	(37)			
				1		
					2	
					3	
	42.	Est-ce qu'il est utile pour une entreprise, lorsque le chef du personnel doit décider d'une promotion, qu'il tienne compte de la vie et des occupations du candidat en dehors du travail?	(38)			
		oui		1		
		non		2		
		ne sait pas		3		
	43.	Quelles sont, parmi les qualités suivantes, celles qui vous semblent importantes pour un collègue de travail: (Nommez-en trois par ordre de préférence)  (Inscrire le 1er choix dans la colonne (39)) (Inscrire le 2ème choix dans la colonne (40)) (Inscrire le 3ème choix dans la colonne (41))	(39) (40) (41)			
NE PAS LIRE						
		-esprit inventif		1	1	1
		-persévérance		2	2	2
		-compréhension rapide		3	3	3
		-facilité d'expression		4	4	4
		-ponctualité		5	5	5
		-humeur égale		6	6	6
		-efficacité		7	7	7
		-bonne culture		8	8	8
	44.	En général, croyez-vous que les ingénieurs ont plus de chances de réaliser leurs possibilités dans une petite ou une grande entreprise? -petite entreprise (où il y a moins que 5 ingénieurs -grande entreprise (où il a 5 ingénieurs et plus) - NE PAS LIRE -autant l'une que l'autre -ça dépend	(42)			
				1		
				2		
				3		
				4		

- 20 -

12  
C  
A  
R  
T  
E

45. (L'interviewer n'écrit rien dans la colonne de codification)  
Quels sont, d'après vous, les qualités d'un bon chef? (43)  
(Nommez-en deux)

1. \_\_\_\_\_

2. \_\_\_\_\_

46. D'après vous, quels sont actuellement parmi les groupes professionnels qui suivent, ceux où les chances de faire une carrière intéressante sont les plus grandes?  
(Inscrire le 1er choix dans la colonne (44)  
(Inscrire le 2ème choix dans la colonne (45)  
(Inscrire le 3ème choix dans la colonne (46)  
(Inscrire le 4ème choix dans la colonne (47)

NE PAS LIRE				
Médecins	1	1	1	1
Courtiers en valeurs	2	2	2	2
Ingénieurs	3	3	3	3
Industriels	4	4	4	4
Professeurs d'université	5	5	5	5
Propriétaires d'une grande entreprise commerciale	6	6	6	6
Avocats	7	7	7	7
Hommes politiques	8	8	8	8
Ne sait pas	9	9	9	9

13  
C  
A  
R  
T  
E

47. Quel mode de traitement vous semble préférable pour un ingénieur? (48)

NE PAS LIRE	
-salaire fixe	1
-participation aux bénéfices selon le rendement individuel	2
-participation aux bénéfices selon le rendement du groupe de travail	3
-participation aux bénéfices selon le succès de l'entreprise	4
-ne sait pas	5

48. Au Québec, pour les ingénieurs canadiens-français, croyez-vous que le fait de ne parler que le français est un obstacle à leur réussite? (49)

oui 1  
non 2  
ne sait pas 3

- 21 -

49. a. Il y a plusieurs manières de diviser la société en groupes opposés. Parmi les deux oppositions suivantes, choisissez celle qui vous semble la plus importante pour décrire la société: (demandez réponse à 1<sup>o</sup> avant de passer à 2<sup>o</sup> et ainsi de suite) (50)

-Ceux qui ont de la volonté/ceux qui se laissent aller 1  
ou

-Riches/pauvres 2

b. Et parmi les oppositions suivantes: (51)

-exploiteurs/exploités 1  
ou

-les gens honnêtes/les gens malhonnêtes 2

c. Et parmi les oppositions suivantes: (52)

-Capitalistes/prolétaires 1  
ou

-Ceux qui ont de l'instruction/ceux qui n'en ont pas 2

d. Et parmi les oppositions suivantes: (53)

-Jeunes/vieux 1  
ou

-Ceux qui travaillent de leurs mains/ceux qui ne travaillent pas de leurs mains 2

e. Et parmi les opposition suivantes: (54)

-Les gens de gauche/les gens de droite 1  
ou

-Les gens des villes/les gens de la campagne 2

14

C  
A  
R  
T  
E

50. Maintenant, voulez-vous choisir parmi les dix oppositions que vous venez de voir, les trois qui vous semblent les plus importantes, pour décrire la société:

(Inscrire le 1er choix dans la colonne (55))

" le 2ème " " " (56)

" le 3ème " " " (57)

(55) (56) (57)

NE PAS LIRE

-Les gens des villes/les gens de la campagne	1	1	1
-Les gens de langue anglaise/les gens de langue française	2	2	2
-Ceux qui travaillent de leurs mains/ceux qui ne travaillent pas de leurs mains	3	3	3
-Riches/pauvres	4	4	4
-Jeunes/vieux	5	5	5
-Exploiteurs/exploités	6	6	6
-Capitalistes/prolétaires	7	7	7
-Les gens honnêtes/les gens malhonnêtes	8	8	8
-Ceux qui ont de l'instruction/ceux qui n'en ont pas	9	9	9
-Ceux qui ont de la volonté/ceux qui se laissent aller	0	0	0



15  
C  
N  
T  
E

- 22 -

51. D'après vous, parmi les groupes suivants, quels sont ceux dont l'apport à la collectivité est le plus important?  
(Veuillez en nommer trois par ordre d'importance)  
(Inscrire le 1er choix dans la colonne (58))  
(Inscrire le 2ème choix dans la colonne (59))  
(Inscrire le 3ème choix dans la colonne (60))

NE PAS LIRE		
Homme politique		
Propriétaire d'une grande entreprise commerciale		
Médecin		
Professeur d'université		
Prêtre		
Créateur d'oeuvres d'art		
Chef syndical		
Industriel		
Homme de science, chercheur		

(58)	(59)	(60)
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

52. a. (L'interviewer n'écrit rien dans la colonne de codification )  
Etes-vous en faveur ou contre le syndicalisme pour les ingénieurs?

NE PAS LIRE	
-en faveur	<input type="checkbox"/>
-contre	<input type="checkbox"/>
-les deux	<input type="checkbox"/>
-ne sait pas	<input type="checkbox"/>

(61) (62)

- b. (L'interviewer n'écrit rien dans la colonne de codification et note les propos du répondant en détail)  
Pourquoi?

- 23 -

Les quelques questions qui suivent sont des questions d'information économique et financière; plusieurs sont relativement difficiles; si vous ne connaissez pas la réponse, n'hésitez pas à le dire.

- |        |   |      |
|--------|---|------|
| 53. a. | i) La British Newfoundland Corporation (Brinco) est-elle une entreprise d'exploitation de richesses naturelles ou une société de financement (holding trust)?                                       | (63) |
|        | financement   | 1    |
|        | richesse naturelle  | 2    |
|        | non réponse   | 3    |
|        | ii) On a beaucoup parlé dernièrement du harnachement des chutes Hamilton. Parmi les noms qui suivent, pouvez-vous me dire quelles sont les DEUX personnes réellement impliquées dans cette affaire? | (64) |
|        | George Marler et Jos. Smallwood   | 2    |
|        | Robert Winters et Jos. Smallwood  | 1    |
|        | Jules Brillant et George Marler   | 3    |
|        | Non réponse   | 4    |
| b.     | (i) Quels sont, parmi les villes suivantes, les deux où il y a une raffinerie d'aluminium?  | (65) |
|        | Beauharnois et Arvida   | 1    |
|        | Arvida et Valleyfield   | 2    |
|        | Valleyfield et Jonquière  | 3    |
|        | non réponse   | 4    |
|        | ii) La production annuelle d'aluminium au Québec est-elle de l'ordre de:  | (66) |
|        | 2 millions de tonnes  | 1    |
|        | ou de   |      |
|        | 4 millions de tonnes  | 2    |
|        | non réponse   | 3    |
| c.     | i) Parmi les compagnies de bière suivantes quelles sont les deux qui sont contrôlées par Canadian Breweries?  | (67) |
|        | Labatt et Molson  | 2    |
|        | Carling et Labatt   | 3    |
|        | O'Keefe et Carling  | 1    |
|        | Non réponse   | 4    |
|        | ii) Canadian Breweries appartient à Argus Corporation, est-ce une société à capitaux américains ou canadiens?   | (68) |
|        | canadiens   | 1    |
|        | américains  | 2    |
|        | non réponse   | 4    |

- 24 -

- d. i) Parmi les personnes suivantes, quelles sont celles qui sont membres du conseil d'administration de la Société Générale de Financement? (69)

Gérard Plourde et Raymond Dupuis	2
René Paré et Marcel Pépin	1
Gérard Plourde et René Paré	3
Non réponse	4

- ii) Est-il vrai que la Société Générale de Financement a acheté les entreprises David Lord Ltée et J.B. Dubé? (70)

Vrai	1
Faux	2
non réponse	3

- e. i) La compagnie Shawinigan Chemicals a plusieurs usines dans la province. Parmi les villes suivantes, quelles sont les deux où cette compagnie a des usines? (71)

Varennnes et Montréal	1
Trois-Rivières et Varennnes	2
Trois-Rivières et Montréal	3
Non réponse	4

- ii) Après la nationalisation de l'électricité au Québec, en 1962, la compagnie Shawinigan Chemicals a changé de main. Elle est maintenant contrôlée par la compagnie Shell. Cette affirmation est-elle? (72)

Vraie	2
Fausse	1
Non réponse	4

- f. i) Le prix de l'once d'or est-il de: (73)

\$30.00	3
\$32.00 ou	2
\$35.00	1
non réponse	4

- ii) Est-il vrai que la couverture or pour les dépôts bancaires aux Etats-Unis a été diminuée et est maintenant moins que 25%? (74)

vrai	1
faux	2
non réponse	3

- 25 -

16

C  
A  
R  
T  
E

54. Quand vous lisez un journal ou une revue, quel genre d'article vous intéresse le plus? (Rangez-en trois par ordre de préférence).

(Indiquer le premier choix dans la colonne (67))

(Indiquer le second choix dans la colonne (68))

(Indiquer le troisième choix dans la colonne (69))

(67) (68) (69)

## NE PAS LIRE

Politique québécoise	1	1	1
Politique canadienne	2	2	2
Politique internationale	3	3	3
Culture (arts, lettres, théâtre, cinéma)	4	4	4
Finances	5	5	5
Questions sociales	6	6	6
Economique	7	7	7
Sports	8	8	8
Technique	9	9	9
Pas de réponse	0	0	0

17

C  
A  
R  
T  
E

55. Quels sont, parmi ces groupes professionnels, ceux qui contribuent le plus à la croissance économique du Québec? Veuillez en nommer deux, par ordre d'importance:

(indiquer 1er choix dans colonne (70))

(indiquer 2ème choix dans colonne (71))

(70) (71)

## NE PAS LIRE

Membres de professions libérales	1	1
Hauts fonctionnaires	2	2
Ministres provinciaux	3	3
Ingénieurs	4	4
Propriétaires d'une grande entreprise commerciale	5	5
Savants et chercheurs	6	6
Industriels	7	7
Ministres fédéraux	8	8
Ne sait pas	9	9

18

C  
A  
R  
T  
E

56. D'après vous, quelles institutions vont contribuer le plus à la croissance économique du Québec?

(Nommez-en deux par ordre de préférence)

(Indiquer le 1er choix dans la colonne (72))

(Indiquer le 2ème choix dans la colonne (73))

(72) (73)

## NE PAS LIRE

La Société générale de Financement	1	1
L'Hydro-Québec	2	2
Les institutions bancaires	3	3
L'aciérie	4	4
Un organisme gouvernemental de planification économique	5	5
Ne sait pas	6	6

- 26 -

57. D'après vous, quel est le type d'entreprise qui s'avère le plus favorable à la croissance économique du Québec? (74)
- |                    |   |
|--------------------|---|
| Entreprise privée  | 1 |
| Entreprises mixtes | 2 |
| Régies publiques   | 3 |
| Ne sait pas        | 4 |
58. A votre avis, pour le développement de l'économie du Québec, quelles sont les sources de capitaux qui sont préférables? Pouvez-vous en nommer deux par ordre de préférence: (Indiquer le 1er choix dans la colonne (75) (Indiquer le 2ème choix dans la colonne (76) (75) (76)
- |                   |   |   |
|-------------------|---|---|
| Québécoise        | 1 | 1 |
| Canadienne        | 2 | 2 |
| Américaine        | 3 | 3 |
| Française         | 4 | 4 |
| Anglaise          | 5 | 5 |
| Autres            | 6 | 6 |
| Aucune importance | 7 | 7 |
| Non réponse       | 8 | 8 |
59. Croyez-vous que l'utilisation de l'anglais comme langue technique dans l'industrie (lire, parler, écrire) sera toujours indispensable au Québec? (77)
- |             |   |
|-------------|---|
| oui         | 1 |
| non         | 2 |
| non réponse | 3 |
60. La croissance rapide peut entraîner certains déséquilibres sociaux; la croissance lente les atténue. A votre avis, duquel de ces deux types de croissance le Québec a-t-il besoin actuellement? (78)
- |                   |   |
|-------------------|---|
| Croissance rapide | 1 |
| Croissance lente  | 2 |
| Ne sait pas       | 3 |
61. A votre avis, croyez-vous qu'il vaille mieux qu'un pays fabrique le plus possible les produits dont'il a besoin, ou qu'il mette plutôt l'accent sur des échanges internationaux? (79)
- |                         |   |
|-------------------------|---|
| Propres produits        | 1 |
| Echanges internationaux | 2 |
| Pas de réponse          | 3 |

19

C  
A  
R  
T  
E

- 27 -

1	2	3	4	5	6
					3

62. Les objectifs suivants interviennent tous dans une politique de croissance; néanmoins on peut établir un certain ordre de priorité. Rangez par ordre de priorité les objectifs suivants:

(Indiquer le 1er choix dans la colonne (7))

(Indiquer le 2ème choix dans la colonne (8))

(Indiquer le 3ème choix dans la colonne (9))

(Indiquer le 4ème choix dans la colonne (10))

(7) (8) (9) (10)

## NE PAS LIRE

Créer de nouveaux emplois	1	1	1	1
Augmenter la productivité des entreprises existantes	2	2	2	2
Industrialiser la Province	3	3	3	3
Développer une région économique	4	4	4	4
Pas de réponse	5	5	5	5

63. Pour encourager la croissance économique au Québec, à quel genre de mesures politiques croyez-vous qu'il faille recourir? (faire répondre à a) avant de passer à b)

- a) Encourager l'entreprise privée ou nationaliser certaines industries?

(11)

-encourager l'entreprise privée

1

-nationaliser certaines industries

2

- b) Elever ou abaisser les barrières tarifaires?

(12)

-abaissér

1

-élever

2

-

- c) Augmenter les impôts ou réduire les taxes sur la production?

(13)

-réduire les taxes

1

- augmenter les impôts

2

64. a. Pourriez-vous me nommer trois catégories de gens dont l'occupation les situe dans la même classe que vous?

(14)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_



- 28 -

b. Pourriez-vous me nommer trois catégories de gens dont l'occupation les situe dans la classe inférieure à la vôtre?

(15)

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

c. Pourriez-vous me nommer trois catégories de gens dont l'occupation les situe dans une classe supérieure à la vôtre?

(16)

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

65. a. Considérez-vous qu'il y a des groupes de gens qui ont des intérêts opposés aux vôtres?

(17)

(p. à b.)    Oui  
(p. à 66)    Non

1  
2

b. (Si oui) quels sont-ils?

(18)

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_

66. Pouvez-vous ranger les classes sociales suivantes dans l'ordre où elles contribuent le plus à la croissance économique du Québec?

(Inscrire le 1er choix dans la colonne (19)  
"    le 2eme "    "    "    (20)  
"    le 3eme "    "    "    (21)  
"    le 4eme "    "    "    (22)

(19) (20) (21) (22)

Ouvrière	1	1	1	1
Bourgeoise	2	2	2	2
Moyenne	3	3	3	3
Agricole	4	4	4	4

67. D'après vous, au Québec, quel est le pourcentage de la main-d'oeuvre agricole?

(23)

\_\_\_\_\_ %

- 29 -

20 C A R T E	68.	Lorsqu'il y a une grève au Québec, vous sentez-vous plutôt impliqué avec les employeurs, avec les ouvriers ou pas impliqué du tout?	(24)						
				employeurs	1				
				ouvriers	2				
				pas du tout	3				
	69.	Pour assurer le développement économique et social du Québec qu'est-ce qui vous paraît préférable?	(25)						
		-un régime plutôt autoritaire			1				
		-un régime plutôt démocratique			2				
	70.	Pour évaluer un homme politique, par exemple, lorsqu'on vote, doit-on tenir compte	(26)						
		-de sa vie privée et sa vie publique			1				
		ou							
		-seulement de sa vie publique			2				
	71.	Qu'est-ce qui est le plus important pour vous dans la vie? (Ranger les 5 items par ordre de préférence)							
		(1er choix dans colonne (27)	(27)	(28)	(29)	(30)	(31)		
		(2ème choix dans colonne (28)							
		(3ème choix dans colonne (29)							
		(4ème choix dans colonne (30)							
		(5ème choix dans colonne (31)							
		travail	1	1	1	1	1	1	1
		loisirs	2	2	2	2	2	2	2
		famille	3	3	3	3	3	3	3
		culture	4	4	4	4	4	4	4
		revenus	5	5	5	5	5	5	5
	72.	A partir de quel revenu croyez-vous possible de commencer à épargner?	(32)						
		\$5,000.							1
		\$7,500.							2
		\$10,000.							3
		\$12,500.							4
		\$15,000.							5
		\$20,000 et plus							6
		On peut toujours épargner							7
		Ne sait pas							8

- 30 -

21  
C  
A  
R  
T  
E

73. Si vous aviez \$100,000. à votre disposition, quels sont parmi les postes de dépense suivants, ceux auxquels serait allouée la plus forte somme? (3 choix par ordre de préférence)

(Inscrire le 1er choix dans la colonne (33)  
( " le 2ème " " " (34)  
( " le 3ème choix " " (35)

(33) (34) (35)

NE PAS LIRE		
-dépenses personnelles	1	1 1
-Immeuble	2	2 2
-actions industrielles et bancaires	3	3 3
-obligations	4	4 4
-assurances	5	5 5
-fonds mutuels	6	6 6
-spéculations minières	7	7 7
-partir à son compte	8	8 8
-autre (quoi?)	9	9 9

74. (L'interviewer n'écrit rien dans la colonne de codification)

Combien, d'après vous, doit rapporter un capital investi pour que vous considériez que c'est un bon placement?

(36)

%

75. a. D'après vous, quel capital quelqu'un doit-il avoir pour qu'on dise de lui qu'il est riche?

(37)

NE PAS LIRE	
\$100,000.	1
\$100,000 à 499,999.	2
\$500,000.	3
plus que \$500,000.	4
Ne sait pas	5

22  
C  
A  
R  
T  
E

b. Croyez-vous que ce sont surtout

(38)

NE PAS LIRE	
-des financiers	1
-des industriels	2
-des politiciens	3
-des propriétaires de grandes entreprises commerciales	4
-des professionnels	5
-des communautés religieuses	6
-autre	7
-Qui?.....	

76. Lorsque vous voulez faire l'acquisition de biens utiles, par exemple, une voiture, croyez-vous qu'il est préférable d'emprunter pour acheter immédiatement ou d'attendre d'avoir épargné la somme nécessaire?

(39)

-emprunter pour achat immédiat	1
-attendre d'avoir épargné	2
-ne sait pas	3

- 31 -

77. D'après vous, est-ce que la fortune apporte davantage de:  
(ranger les 4 possibilités par ordre d'importance)

(Inscrire le 1er choix dans la colonne	(40)			
( " le 2ème " " "	(41)			
( " le 3ème " " "	(42)			
( " le 4ème " " "	(43)	(40)	(41)	(42) (43)

-Soucis	1	1	1	1
-Pouvoir	2	2	2	2
-Possibilité d'acquérir des biens coûteux	3	3	3	3
-Confirmation de sa valeur personnelle	4	4	4	4

78. Qu'est-ce qui est le plus souhaitable pour un entrepreneur  
de 60 ans qui a bien réussi:

(44)

-Qu'il continue à faire prospérer son entreprise.	1
-Qu'il se retire de ses affaire pour jouir du fruit de son travail	2
-non réponse	3

79. a. Croyez-vous qu'il y a des différences entre un homme  
d'affaires canadien-français et un homme d'affaire  
canadien-anglais.

(45)

-oui (p. à b.)	1
-non (p. à Q.80)	2
-non réponse (p. à Q.80)	3

- b. (L'interviewer n'écrit rien dans la colonne de  
codification)

Si oui, quelles sont-elles?

(46)

---



---



---



---



---

- 32 -

80. Certains disent que la réussite de la société américaine nécessite la compétition poussée au maximum, amenant les plus doués au sommet.
- D'autres soulignent que cette compétition crée des inégalités sociales excessives et favorisent un système plus égalitaire.
- Laquelle de ces deux formules vous paraît préférable? (47)
- |                          |   |
|--------------------------|---|
| -compétition             | 1 |
| -système plus égalitaire | 2 |
| -non réponse             | 3 |
81. Est-il préférable, à votre avis, que le propriétaire d'une entreprise qui a trois fils, lègue son entreprise à ses trois fils ou la lègue à l'un d'entre eux, donnant aux deux autres les moyens de se placer ailleurs? (48)
- |                      |   |
|----------------------|---|
| -aux trois fils      | 1 |
| -un seul d'entre eux | 2 |
| -ne sait pas         | 3 |
82. Etant donnée la psychologie du personnel subalterne dans votre milieu, est-ce un commandement très ferme ou un commandement tolérant qui donne finalement les meilleurs résultats:
- a) avec les employés de bureau (49)
- |              |   |
|--------------|---|
| -ferme       | 1 |
| -tolérant    | 2 |
| -non réponse | 3 |
- b) avec les ouvriers (50)
- |              |   |
|--------------|---|
| -ferme       | 1 |
| -tolérant    | 2 |
| -non réponse | 3 |
83. (L'interviewer n'écrit rien dans la colonne de codification)
- a. Avez-vous l'impression que l'éventail des salaires du plus haut au plus bas dans la société au Québec, a tendance à s'élargir ou, au contraire, à se fermer? (51)
- |              |                          |
|--------------|--------------------------|
| -s'élargir   | <input type="checkbox"/> |
| -se fermer   | <input type="checkbox"/> |
| -ne sait pas | <input type="checkbox"/> |

- 33 -

b. Croyez-vous que c'est une bonne chose ou que le contraire serait préférable?

- bonne chose
- contraire préférable
- ne sait pas

84. D'après vous, devant les dispositions légales qui ont trait à l'impôt sur le revenu, quelle est l'attitude la plus normale:

(52)

- une observance à la lettre
- profiter autant que possible des échappatoires prévues par la loi
- s'en tirer de toutes façons avec le moins de frais possible
- Ne sait pas

1

2

3

4

85. D'après vous, combien de temps de vacances est-il normal qu'un ingénieur d'âge moyen prenne à chaque année?

(53)

NE PAS LIRE

- 1 semaine
- 2 semaines
- 3 semaines
- 1 mois
- 5 semaines
- 6 semaines
- + que 6 semaines
- Ne sait pas

1

2

3

4

5

6

7

8

86. Considérez-vous les loisirs:

(54)

- plutôt comme une façon de vous divertir
- ou
- plutôt comme un moyen de vous reposer afin de mieux travailler

1

2

87. Vous arrive-t-il d'écouter la radio ou de regarder la télévision en anglais?

(55)

- Souvent
- Quelquefois
- Jamais
- Non réponse

1

2

3

4



- 34 -

88. (L'interviewer n'écrit rien dans la colonne de codification)

Quels sont les principaux journaux et revues que vous lisez?  
(Les faire nommer)

parmi les quotidiens (56)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

parmi les hebdomadaires (57)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

parmi les mensuels d'information (58)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

parmi les mensuels ou autres revues d'opinion (59)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

parmi les revues techniques (60)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- 35 -

89. De quels pays viennent les films que vous préférez?  
(Veuillez en nommer deux par ordre de préférence)

(Inscrire le 1er choix dans la colonne (61)

( " le 2ème " " " " (62)

NE PAS LIRE

-France
-Angleterre
-Italie
-Etats-Unis
-Ailleurs
-N'y va jamais

(61) (62)

1	1
2	2
3	3
4	4
5	5
6	6

90. (L'interviewer n'écrit rien dans les colonnes de codification)

- a. De quels clubs sociaux êtes-vous membre?

(63)

Desquels vous occupez-vous activement?

- b. De quels clubs privés êtes-vous membre?

(64)

Desquels vous occupez-vous activement?

- c. De quelles associations êtes-vous membre?

(65)

Desquelles vous occupez-vous activement?

(66)

(67)

91. Croyez-vous que dans votre profession, les femmes sont aptes  
à assumer des fonctions importantes dans l'industrie?

(68)

Oui 1  
non 2  
non réponse 3

92. D'après vous, quel est le nombre idéal d'enfants pour une  
famille ?

(69)

1	1
2	2
3	3
4	4
5	5
6 +	6
Aucun	7
non réponse	8

- 36 -

- b. On discute beaucoup de planification des naissances; croyez-vous que c'est une mesure souhaitable au Québec?

(70)

Oui

Non

Non réponse

1

2

3
93. a. Préférez-vous que vos enfants aillent à une école qui accepte des enfants de divers types de quartiers résidentiels ou préférez-vous qu'ils aillent à une école où ils rencontreraient surtout des enfants d'un milieu semblable au leur?

(71)

-différents quartiers

-milieu semblable

-pas de préférence

1

2

3
- b. Préférez-vous que vos enfants fassent leurs études en français ou en anglais?

(72)

NE PAS LIRE

-en français

-en anglais

-dans les deux langues

-non réponse

1

2

3

4
94. A quelle faculté souhaiteriez-vous que votre fils poursuive ses études s'il en avait les aptitudes et le goût (compte tenu du fait que vous le laissez entièrement libre)?

(73)

NE PAS LIRE

-Génie

-Médecine

-Sciences

-Sciences sociales

-Droit

-Commerce et Administration

-Autres facultés techniques

-Autres facultés

-non réponse

1

2

3

4

5

6

7

8

9

- 37 -

95. a. A quel âge permettriez-vous à votre fille de sortir seule le soir? (74)

Inscrire l'âge: \_\_\_\_\_

b. A quel âge permettriez-vous à votre fils de sortir seul le soir? (75)

Inscrire l'âge: \_\_\_\_\_

96. Qu'est-ce qui est le plus important d'enseigner à un enfant pour le préparer à la vie? (Veuillez ranger les 4 par ordre de préférence)

(Inscrire le 1er choix dans la colonne (76)

" le 2ème " " " (77)

" le 3ème " " " (78)

" le 4ème " " " (79)

-travailler fort

-aider les autres quand ils en ont besoin

-sens de l'épargne

-respect de l'autorité

(76) (77) (78) (79)

1 1 1 1

2 2 2 2

3 3 3 3

4 4 4 4

97. a. Vous considérez-vous à l'heure actuelle comme membre d'une Eglise?

1 2 3 4 5 6  
4

(7)

-oui (p. à b. etc.)

-non (p. à d.)

-

1

b. (Si oui), Laquelle?

NE PAS LIRE

-catholique

-anglicane

-baptiste

-presbytérienne

-Eglise Unie

-Grecque orthodoxe

-Judaïque

-Autre (Laquelle?.....)

2

3

4

5

6

7

8

9

c. Pour ce qui est de la pratique, diriez-vous que vous pratiquez?

(8)

-régulièrement

-presque toujours

-assez souvent

-rarement

-jamais

(P. à Q. 98)

1

2

3

4

5

- 38 -

- d. (Si non), Diriez-vous que vous êtes:
- Incroyant

-Croyant sans religion

-Athée

-Agnostique
- (9)

1

2

3

4

98. (L'interviewer n'écrit rien dans la colonne de codification)
- Si vous pensez à une personne que vous admirez particulièrement  
quelles sont les principales qualités que vous admirez chez  
elle? (Nommez-en deux)
1. \_\_\_\_\_

2. \_\_\_\_\_
- (10)

99. a. (L'interviewer n'écrit rien dans la colonne de codification)
- Quelles sont les occupations de vos trois meilleurs amis?
1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_
- (11)

(12)

(13)

- b. Sont-ils canadiens-français?
- (14)

NE PAS LIRE	
3 canadiens-français	1
2can. français/1 can. anglais	2
2 can. français/ 1 néo-canadien	3
2 can. anglais/1 can. français	4
2 can. anglais/1 néo-canadien	5
2 néo-canadiens/1 can. français	6
2 néo-canadiens/1 can. anglais	7
1 can. français/1 can. anglais/ 1 néo canadien	8
Ne sait pas	9

- c. Fréquentez-vous socialement plusieurs personnes qui ne sont  
pas canadiennes françaises?
- Oui

Non
- (15)

1

2

- 39 -

100. a. Est-ce que vos père. et mère ou vos beaux-parents habitent  
dans un rayon de 100 milles de Montréal? (16)
- |                           |   |
|---------------------------|---|
| Oui                       | 1 |
| Non /                     | 2 |
| Tous décédés<br>(p. à c.) | 3 |
- b. Voyez-vous les uns ou les autres? (17)
- |                      |   |
|----------------------|---|
| Toutes les semaines  | 1 |
| 2 ou 3 fois par mois | 2 |
| 1 fois par mois      | 3 |
| quelquefois par an   | 4 |
| 1 fois par an        | 5 |
| moins souvent        | 6 |
| non réponse          | 7 |
- c. Est-ce que certains de vos frères et soeurs ou beaux-frères  
et belles-soeurs habitent dans un rayon de 100 milles de  
Montréal? (18)
- |                           |   |
|---------------------------|---|
| Oui                       | 1 |
| Non                       | 2 |
| Tous décédés<br>(P. à e.) |   |
- d. Voyez-vous les uns ou les autres? (19)
- |                      |   |
|----------------------|---|
| Toutes les semaines  | 1 |
| 2 ou 3 fois par mois | 2 |
| 1 fois par mois      | 3 |
| quelques fois par an | 4 |
| 1 fois par an        | 5 |
| moins souvent        | 6 |
| non réponse          | 7 |
- é. Est-ce que certains de vos oncles et tantes ou cousins  
et cousines habitent dans un rayon de 100 milles de  
Montréal? (20)
- |              |   |
|--------------|---|
| Oui          | 1 |
| Non          | 2 |
| Tous décédés | 3 |
- f. Voyez-vous les uns ou les autres? (21)
- |                      |   |
|----------------------|---|
| toutes les semaines  | 1 |
| 2 ou 3 fois par mois | 2 |
| 1 fois par mois      | 3 |
| quelquefois par an   | 4 |
| 1 fois par an        | 5 |
| moins souvent        | 6 |
| non réponse          | 7 |



- 40 -

101.a. (L'interviewer n'écrit rien dans la colonne de codification)

25  
C  
A  
R  
T  
E

Parmi les individus ayant les caractéristiques suivantes, pourriez-vous ranger par ordre, ceux que vous préféreriez que votre fille épouse, compte tenu du fait que vous la laissez évidemment entièrement libre.

Ranger de 1 à 6

	Professionnel	Collet-blanc	Ouvrier Spécialisé
Canadiens-Français			
Canadien-Anglais			

b. Même question: Ranger de 1 à 6

	Catholique	Protestant	Aucune religion
Canadien-Français			
Canadien-Anglais			

c. Même question: Ranger de 1 à 9

	Professionnel	Collet-blanc	Ouvrier spécialisé
Catholique			
Protestant			
Aucune religion			

- 41 -

102. Les Québécois appartiennent à différentes sociétés;  
auxquelles de ces sociétés diriez-vous que vous appartenez,  
par ordre d'importance:

(Inscrire le 1er choix dans la colonne (71)

" le 2ème choix " " (72)

" le 3ème " " (73)

" le 4ème " " (74)

	(71)	(72)	(73)	(74)
Canadienne	1	1	1	1
Nord américaine	2	2	2	2
canadienne-fran-				
caise	3	3	3	3
francophone	4	4	4	4

103. Si vous décidiez d'aller vivre ailleurs, où iriez-vous?

(2 choix)

(Inscrire le 1er choix dans la colonne (75)

" le 2ème " " (76)

NE PAS LIRE

	(75)	(76)
Ailleurs au Canada	1	1
Etats-Unis	2	2
France	3	3
Angleterre	4	4
Ailleurs en Europe	5	5
Ailleurs	6	6

104. (L'interviewer n'écrit rien dans la colonne de codification)

D'après vous, quels sont les trois problèmes les plus importants, aujourd'hui au Québec? (Par ordre d'importance)

(77) (78) (79)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

## SURVEY ON ENGINEERS - PROJECT 006

INTERVIEW NO.

--	--	--	--	--

RESPONDENT'S NAME:

ADDRESS:

TELEPHONE NO:

START:

END:

TIME SPENT:

INTERVIEWER'S NAME

DATE:

REMARKS:(In case you cannot complete the interview,  
please state reasons here)

MONTREAL, MARCH - APRIL 1965.

1

Attitudes of the engineers of  
greater Montreal toward cultural  
and economic life.

Institut de Recherche  
en Sciences Sociales

QUESTIONNAIRE

	1	2	3	4	5	6
1. a. What language did you first learn as a child?	(7)					
English	2					
French	1					
Other	3					
b. What language do you usually speak at home?	(8)					
English	2					
French	1					
Other	3					
2. (Do not write in the margin)						
a. In what city, town or village were you brought up (until the age of 7)?	(9)				(10)	
a. City . . . . .						
b. County . . . . . Province, country . . . (if outside Quebec)						
3. a. How many brothers and sisters do you have (who lived at least until the age of 16)?	(11)					
0	1					
1	2					
2	3					
3	4					
4	5					
5	6					
6	7					
8 +	9					
b. How many are older than you (among those you have just mentioned)?	(12)					
0	1					
1	2					
2	3					
3	4					
4	5					
5	6					
6	7					
8 +	9					

- 2 -

c. (Do not write in the margin) What are the occupations of your brothers and of the husbands of your sisters?

(13)

(14)

Brothers:

_____	(If owner or
_____	manager of
_____	business or
_____	industrial con-
_____	cern, ask the
_____	number of
_____	employees)

Brothers-in-law:

_____	(If owner or
_____	manager of
_____	business or
_____	industrial
_____	concern, ask
_____	the number of
_____	employees)

4. How old are you?

(15)

(16)

(Please write the age in the box in the margin)

<div></div>	<div></div>
-------------	-------------

5. What is your marital status?

(17)

single (go to 8) 1

married 2

widowed 3

separated or divorced 4

6. a. At what age did you marry?

(18)

DO NOT READ	
20 and less	1
21-22	2
23-24	3
25-26	4
27-28	5
29-30	6
31-32	7
33 and more	8

- 3 -

b.	What is your wife's ethnic origin?.....	(19)
	English Canadian	2
	French Canadian	1
	English	3
	French	4
	Scottish	5
	Irish	6
	Other	7
	Which one.....	
c.	How many children do you have? (Please write the number in the box in the margin)	(20)
	(If more than nine, write 9)	<div></div>
7.	Is your wife employed? (be it full time or part time).	(21)
	Yes	1
	No	2
8. a.	What was your schooling before your engineering course?	(22)
	Grade 11, 12 or 13, or Senior Metric	
	in English	2
	in French	1
	B.A.	
	in English	4
	in French	3
	Other	
	in English	6
	in French	5
b.	At which university did you take your engineering course?	(23)
	DO NOT READ	
	McGill University	2
	Polytechnique	1
	Elsewhere in English inCanada	4
	Elsewhere in French in Canada	3
	Outside Canada	5



- 4 -

c. In what area of engineering did you specialize? (24)

chemical	1
civil (public works)	2
electrical	3
engineering physics	4
geological	5
mechanical	6
metallurgical	7
mining	8
other	9

d. Did you go on with post-graduate studies? (25)

yes	1
no	2

9. a. In what type of firm are you working? (26)

consulting office	1
small private firm (where less than 5 engineers are employed)	2
large private firm (where 5 or more engineers are employed)	3
Hydro-Quebec	4
City of Montreal	5
Other cities and towns	6
Provincial government	7
Federal government	8
Crown corporations (transport and communication)	9
Teaching establishment	0

b. Are you salaried, a partner, or are you at the head of your business? (27)

salaried	1
partner	2
head of your own business	3
salaried and own business	4

c. Does your actual work call upon your engineering knowledge? (28)

yes (go to d.)	-
no (go to e.)	1

- 5 -

d. (If yes), in what proportion?

DO NOT READ

100%	2
85 to 99%	3
70 to 84%	4
55 to 69%	5
40 to 54%	6
25 to 39%	7
10 to 24%	8
9 and less	9

e. Do you work in the field in which you are specialized? (29)

Yes	1
No	2
No answer	3

f. (Do not write in the margin)

How many persons work under your direction? (30)

g. Which of the following categories would best describe the type of work you are engaged in? (31)

-management	1
-construction, installation, erection	2
-design	3
-field exploration	4
-production maintenance	5
-research	6
-sales, service, marketing, purchasing	7
-teaching	8
-testing, inspecting, laboratory services	9
-Other	0

h. In what branch of industry do you work? (32)

DO NOT READ

-chemical	1
-civil	2
-electrical	3
-engineering physics	4
-geological	5
-mechanical	6
-metallurgical	7
-mining	8
-other	9

- 6 -

10. In which of the following categories are your annual earnings situated? (Could you please give me the number that corresponds to that category)

(33)

1  
C  
A  
R  
D

DO NOT READ

\$5,000. to \$ 7,999.
8,000. to 10,999.
11,000. to 13,999. /
14,000. to 16,999.
17,000. to 19,999.
20,000. to 22,999.
23,000. to 25,999./
26,000. to 28,999.
29,000. to 31,999.
32,000. and more

1  
2  
3  
4  
5  
6  
7  
8  
9  
0

11. a. (Do not write in the margin)

What was your father's occupation when he was your age? (34)  
(If he was dead, his last occupation)

\_\_\_\_\_  
\_\_\_\_\_

a.a. Was he the owner? Yes ☐ (go to a.a.a.)  
No ☐ (go to b.)

a.a.a. (If owner), how many employees did he have?

\_\_\_\_\_

b. How many years of schooling did you father complete? (35)

DO NOT READ

primary school (grade 7 or less
grade 8,9 or 10
grade 11, 12 or 13 or senior
metric
B.A.
University degree
Other
Does not know

1  
2  
3  
4  
5  
6  
7

c. How many children were there in your father's family who live at least until the age of 16?

(36)

1  
2  
3  
4  
5  
6  
7  
8  
9 +

1  
2  
3  
4  
5  
6  
7  
8  
9 +

- 7 -

- d. (Do not write in the margin)  
 What was his father's occupation at the same age?  
 (if he was dead, his last occupation)
- \_\_\_\_\_
- \_\_\_\_\_
- dd. Did he work for himself? Yes ☐ (go to ddd.)  
 No. ☐ (go to e.)
- ddd. (If so,) How many employees did he have?.....
- e. (Do not write in the margin)  
 What was your mother's father's occupation at the  
 same age? (If he was dead, his last occupation)
- \_\_\_\_\_
- \_\_\_\_\_
- ee. Did he work for himself? Yes ☐ (Go to eee.)  
 No ☐ (Go to f.)
- eee. (If so) How many employees did he have? \_\_\_\_\_
- f. (Do not write in the margin)  
 What was your wife's father's occupation at the  
 same age? (If he was dead, his last occupation)
- \_\_\_\_\_
- \_\_\_\_\_
- ff. Did he work for himself? Yes ☐ (Go to fff.)  
 No ☐ (Go to Q. 12a.)
- fff. (If so), how many employees did he have? \_\_\_\_\_

(37)

1  
2  
3  
4  
5  
6

(38)

1  
2  
3  
4  
5  
6

(39)

1  
2  
3  
4  
5  
6

- 8 -

12. a. In what type of firm did you work immediately upon graduation from engineering school? (40)

- consulting office 1
- small private firm (where less than 5 engineers are employed) 2
- large private firm (where 5 or more engineers are employed) 3
- Hydro-Québec 4
- City of Montreal 5
- Other cities or towns 6
- Provincial government 7
- Federal government 8
- Crown corporation (Transport and Communication) 9
- Teaching establishment 0

b. In what branch of industry? DO NOT READ (41)

- chemical 1
  - civil (public work) 2
  - electrical 3
  - engineering physics 4
  - geological 5
  - mechanical 6
  - metallurgical 7
  - mining 8
  - other 9

c. (Do not write in the margin)

Where was it situated? (42)  
(precisely, city or village.....)  
\_\_\_\_\_  
\_\_\_\_\_

d. How old were you then? (43) (44)  
(Put down the age in the box in the margin)

--	--

- 9 -

e. What was your annual salary at that time? (45)

## DO NOT READ

\$1,000. to \$1,999.	1
\$2,000. to \$2,999.	2
\$3,000. to \$3,999.	3
\$4,000. to \$4,999.	4
\$5,000. to \$5,999.	5
\$6,000. to \$6,999.	6
\$7,000. to \$7,999.	7
\$8,000. to \$8,999.	8
\$9,000. to \$9,999.	9

f. (Do not write in the margin)

Did you aspire to a technical or administrative career? (46)

technical ☐  
 administrative ☐  
 both ☐  
 no answer

g. Why?

- mainly in view of the type of work ☐  
 - mainly in view of the opportunities for advancement ☐  
 - no answer ☐

13.a. In how many different firms have you worked since you completed your engineering course? (including the one for which you are working at present) (47)

1	1
2	2
3	3
4	4
5	5
6 +	6

b. Have you ever worked outside Montreal (with a change of residence), since you completed your engineering course? (If yes), in how many cities or towns? (48)

Yes - 1 city or town 1  
 Yes - 2 or 3 cities or towns 2  
 Yes - 4 and more cities or towns 3  
 No 4



- 10 -

14. a. (Do not write in the margin for a.b.c.d and c.)

Have you ever given thought to establishing your own firm since you began working as a professional engineer? (49)

Yes ☐ (Go to 14 b.)

No ☐ (Go to 14 e.)

b. (If yes) have you ever tried?

Yes ☐ (Go to 14 c.)

No ☐ (Go to 14 e.)

c. (If yes) did you succeed?

Yes ☐ (Go to 14 e.)

No ☐ (Go to 14 d.)

d. (If not), to what factors would you attribute this failure? (50)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

e. How many engineers have you known who tried to establish their own firm? (successfully or not) (51)

\_\_\_\_\_

15. a. How did you obtain your first job? (52)

- |  |   |
|--|---|
| - through recruiting at the University | 1 |
| - through relatives                    | 2 |
| - through connections                  | 3 |
| - through an advertisement             | 4 |
| - by applying directly                 | 5 |
| - in some other way                    | 6 |
| - no answer                            | 7 |

- 11 -

- b. When you last changed your position, how did you obtain your new one? (53)

## DO NOT READ

- |                           |   |
|---------------------------|---|
| -did not change           | 1 |
| -through relatives        | 2 |
| -through an advertisement | 3 |
| -joined a partnership     | 4 |
| -a job was offered to you | 5 |
| -through connections      | 6 |
| -by applying directly     | 7 |
| -founded your own firm    | 8 |
| -in some other way        | 9 |

16. When you chose to become an engineer, what was your father's attitude? (54)

- |                          |   |
|--------------------------|---|
| -satisfied               | 1 |
| -indifferent             | 2 |
| -disappointed or opposed | 3 |
| -deceased                | 4 |
| -do not know             | 5 |
| -no answer               | 6 |

17. a. Would you have liked to take up another profession? (At the time you chose to be an engineer) (55)

- |            |   |
|------------|---|
| -yes       | - |
| -no        | 1 |
| -no answer | 2 |

- b. (If so), which one?

## DO NOT READ

- |                                    |   |
|------------------------------------|---|
| -medicine                          | 3 |
| -industrial or business activities | 4 |
| -another professional activity     | 5 |
| -artistic activity                 | 6 |
| -scientific activity               | 7 |
| -other                             | 8 |
| - which one?                       |   |

- c. Why did you not do so? (56)

## DO NOT READ

- |  |   |
|--|---|
| -academic requirements or length of studies                | 1 |
| -lack of money   | 2 |
| -problem of succeeding or of earning a satisfactory salary | 3 |
| -lack of professional orientation                          | 4 |
| -other reasons   | 5 |
| -which one? _____  | 6 |
| -no answer   | 7 |

2

C  
A  
R  
D

- d. If you could go back and start your life over again, would you choose a different career? (57)

- |               |   |
|---------------|---|
| Yes           | - |
| No (Go to f.) | 1 |
| do not know   | 2 |

- 12 -

e. (If yes) Which one?

DO NOT READ

Medicine	3
Industrial or business activity	4
Another professional activity	5
Artistic activity	6
Scientific activity	7
Other	8
Which one~	

f. (Do not write in the margin)

If you could start your working life again, would you choose a technical or an administrative career? (58)

technical	<input type="checkbox"/>
administrative	<input type="checkbox"/>
does not know	<input type="checkbox"/>

g. Why?

type of work	<input type="checkbox"/>
opportunity for advancement	<input type="checkbox"/>
does not know	<input type="checkbox"/>

18. a. What language do you use most often with your superiors: (59)

English or French?

-English	100%	}	4
(in what pro-	80%		
portion)	60%		
<input type="checkbox"/> or			
-French	100%	}	1
(in what pro-	80%		
portion)	60%		
-Both equally			2
			3
			7

b. At work what language do you use most often with your colleagues: English or French? (60)

-English	100%	}	4
(in what pro-	80%		
portion)	60%		
<input type="checkbox"/> or			
-French	100%	}	1
(in what pro-	80%		
portion)	60%		
-Both equally			2
			3
			7

- 13 -

- c. What language do you use most often with your subordinates at work: English or French?

(61)

-English	100%	}	4
(in what proportion)	80%		5
	60%		6
<div style="text-align: center;"><span style="border: 1px solid black; padding: 0 2px;">or</span></div>			
-French	100%	}	1
(in what proportion)	80%		2
	60%		3
-Both equally	_____		7

19. a. (Do not write in the margin)

According to you, what are the most characteristic qualities of French Canadians? Could you name three:

(68) (69) (70)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

- b. Now, could you state three shortcomings which you consider to be characteristic of French Canadians:

(71) (72) (73)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

- c. According to you, what are the most characteristic qualities of English Canadians? Could you name three:

(62) (63) (64)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

- d. Now, could you state three shortcomings which you consider to be characteristic of English Canadians?

(65) (66) (67)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

- 14 -

20. Do you believe:

(74)

3

that you will eventually occupy a slightly higher position than the one you have now (or if he is head or partner of an enterprise) that you will make normal progress with your enterprise?

1

or that you will eventually occupy a definitely higher position than the one you now have (or if he is head or partner of an enterprise) that you will make considerable progress with your enterprise?

2

or that you will reach the top management level of a firm

3

or do you believe you have reached the highest possible point in your career.

4

21. To get a promotion, would you be willing to leave Montreal:

a. If you were to be sent elsewhere in Quebec

(75)

Yes

1

No

2

3

b. If you were to be sent elsewhere in Canada, but outside Quebec?

(76)

Yes

1

No

2

3

c. If you were to be sent outside Canada?

(77)

Yes

1

No

2

3

d. (If married) Would your wife agree to leave Montreal?

(78)

yes

1

No

2

3

4

22. In your opinion, in the general management of a large enterprise, is it best to have someone who was trained as:

(79)

an economist

1

an engineer

2

an administrator

3

C  
A  
R  
D

- 15 -

23. Would you say that managing an enterprise is rather:

the art of producing  
or  
the art of organizing

1	2	3	4	5

(7)

1

2

24. a. Where do you think a young English Canadian engineer has the best chances of succeeding in his career:

In Quebec  
Elsewhere in Canada  
In the U.S.A.  
Elsewhere abroad

(8)

1

2

3

4

5

6

b. Why would you say there are more chances for a young engineer to succeed in.....?

(9)

(Name the country just mentioned)

-the employment conditions  
(salary, security, employment)  
-a more flourishing economy  
-a greater need of engineers  
-more chances of being promoted  
-other reasons \_\_\_\_\_

1

2

3

4

5

25. In general do you think that the training provided for engineers makes them too specialized professionally or not sufficiently specialized:

(10)

too specialized  
not sufficiently specialized  
just specialized enough

1

2

3

4

26. If you were to advise a student who wants to go abroad to pursue graduate studies, where would you suggest that he should go?

(11)

A. For engineering

England	2
France	1
United States	3
Elsewhere in Canada	4
Elsewhere in Europe	5
Depending on the specialization	6



- 16 -

B. In general

DO NOT READ

-England	2
-France	1
-United States	3
-Elsewhere in Canada	4
-Elsewhere in Europe	5
-Depending on the specialization	6

27. Do you think that a training period of a year as a worker in a firm at the end of his university course would help the future engineer to do a better job later on. (12)

Yes	1
No	2

28. Do you think that possible economic growth in Quebec would effect significant improvements in your position? (14)

Yes	1
No	2
Do not know	3

29. a. In what type of firm would you suggest that a young engineer start working? (15)

-small private firm	1
-public service	2
-large private firm	3
-public enterprise	4
-consulting office	5
-indifferent	6
-no answer	7

- b. Why? (Give two reasons in order of preference)? (16)

DO NOT READ

-possibility of doing creative and demanding work	1	1
-work atmosphere	2	2
-opportunities for advancement and high salary	3	3
-possibility of acquiring valuable experience	4	4
-employment security	5	5
-possibility to start out on your own	6	6
-pension fund	7	7
-other reasons	8	8
-no answer	9	9

4

C  
A  
R  
D

- 17 -

30. Which in your opinion are the two factors which most contribute to personal success. (Name 2 in order of preference)

5

C  
A  
R  
D

(Code 1st choice in column (18)  
" 2nd " " (19)

(18) (19)

## DO NOT READ

-moral qualities	1	1
-work	2	2
-type of education	3	3
-social connections	4	4
-membership in an ethnic group	5	5
-social origin	6	6
-talent	7	7
-ambition	8	8
-does not know	9	9

31. According to you, which of the following personal qualities are most conducive to success? (Name two in order of preference) (20) (21)  
(Code 1st choice in column (20)  
" 2nd " " (21)

6

C  
A  
R  
D

## DO NOT READ

-ability to handle people	1	1
-ability to make decisions	2	2
-technical knowledge	3	3
-perseverance and great capacity for work	4	4
-sound judgement	5	5
-decisiveness	6	6
-other qualities	7	7
-does not know	8	8

32. Supposing that two positions were offered to you, what are the two primary reasons that would prompt you to choose one position rather than another? (Name two in order of preference)  
(Code 1st choice in column (22)  
" 2nd " " (23)

7

C  
A  
R  
D

## DO NOT READ

-opportunity to work independently	1	1
-opportunities for advancement	2	2
-work that stimulates your interest	3	3
-the firm's good name	4	4
-work atmosphere	5	5
-prestige of the work	6	6
-other reasons	7	7
-does not know	8	8

- 18 -

33. a. According to you which two of the following roles does the engineer especially play in the Quebec economy? (Name in order of importance.) (Circle first choice in column (24) and second choice in column (25))

DO NOT READ

- Specialist in an enterprise, or in a consulting engineering firm
- Member of professional or scientific associations
- Decision maker, to a certain extent, with regard to the general policies of an enterprise
- Member of socially or politically orientated associations
- Citizen of a state who can exercise his rights
- Member of a trade union
- Does not know

(24) (25)

1	1
2	2
3	3
4	4
6	6
5	5
7	7

b. According to you, which of these roles should be stressed with regard to his participation in the Quebec economy?

(26) (27)

DO NOT READ

- Specialist in an enterprise, or in a consulting engineering firm
- Member of professional or scientific associations
- Decision maker, to a certain extent, with regard to the general policies of an enterprise
- Member of socially or politically orientated associations
- Citizen of a state who can exercise his rights
- Member of a trade union
- Does not know

1	1
2	2
3	3
4	4
6	6
5	5
7	7

34. Do you think that engineers should participate to a greater extent to the management of an enterprise or do they participate enough already?

(28)

should participate to a greater extent  
participate enough  
does not know

1  
2  
3

35. a. Would you accept an important promotion which would reduce the amount of time you can devote to your family and would require you to work longer hours?

(29)

Yes (Go to aa.)  
No (Go to b.)

—  
1

aa. (If yes) how much of an increase would you accept:

(Suggest EACH category until he answers 'no', then code the LAST category he ACCEPTS )

10 more hours per week
15 more hours per week
20 more hours per week
25 more hours per week
30 more hours per week
35 more hours per week
No answer

2  
3  
4  
5  
6  
7  
8

- 19 -

b. What would you say is your weekly average of working hours? (30)

30	1
35	2
40	3
45	4
50	5
55	6
60	7
More than 60 hours	8

36. Do you think it is preferable to be: (31)

-at the head of a medium-sized firm	1
-a high executive in a large firm	2
-no difference	3
-no answer	4

37. a. Some say that they couldn't be happy if they did not work: Others would stop working immediately if they could afford it.

Which of these alternatives would correspond more closely to your attitude (towards work). (32)

-Unhappy without work (Go to b)	-
-Happy without work (Go to Q.38)	1

B. Why do you think that you would be unhappy if you stopped working?

DO NOT READ

10

C
A
R
D

-Need to be active and would be bored without work	2
-Man fulfills himself by being productive	3
-Would feel useless	4
-Man was made to work, not to be idle	5
-Like to work	6
-No answer	7

38. a. What do you like most in your work? (33)

b, What do you most dislike? (34)

39. Do you think it is usually true to say that an individual's position and salary are good measures of his ability : (35)

Yes	1
No	2
Does not know	3

- 20 -

40. Out of two equally important positions requiring

- the first one: qualities that you possess

- the second one: qualities that you do not possess, but that you would have advantage to acquire through experience

(36)

Which one you choose?

- qualities actually possessed

- qualities to be acquired

- no answer

1

2

3

41. According to you which one of the two following firms functions best?

(37)

- the one in which the different functions, responsibilities and execution standards in the organization of work are clearly defined by the management

or

- the one in which the management, while indicating the general outlines of organization, allows personnel more freedom in their work

- does not know

1

2

3

42. Is it wise, in the interest of a firm, that its personnel manager take into account the life and activities of a candidate outside of his work, when it comes to promotions?

(38)

Yes

No

Does not know

1

2

3

43. Which, among the following qualities, seems to you most important for a colleague to have? (Name, three in order of preference).

(Code the 1st choice in column (39)

" " 2nd " " " (40)

" " 3rd " " " (41)

DO NOT READ

(39) (40) (41)

- inventive mind

- perseverance

- quick understanding

- articulateness

- punctuality

- even temper

- efficiency

- wide culture

1

2

3

4

5

6

7

8

1

2

3

4

5

6

7

8

- 21 -

44. Do you believe that the engineers you know have more opportunities to fulfill their potentialities in a small or a large firm? (42)

-small firm (where less than 5 engineers are employed) 1  
 -large firm (where 5 or more engineers are employed) 2

DO NOT READ

-both equally 3  
 -depending 4

45. (Do not write in the margin)  
 What are, according to you, the qualities of a good boss? (43)  
 (Name two in order of preference)

1. \_\_\_\_\_

2. \_\_\_\_\_

46. In your opinion, which of the following professions now offer the most opportunities of pursuing an interesting career?

(Name four in order of preference)

(Code the 1st choice in column (44))

" " 2nd " " (45)  
 " " 3rd " " (46)  
 " " 4th " " (47)

DO NOT READ

	(44)	(45)	(46)	(47)
-Physician	1	1	1	1
-Broker	2	2	2	2
-Engineer	3	3	3	3
-Owner or manager of big industries	4	4	4	4
-University professor	5	5	5	5
-Owner or manager of big business concerns	6	6	6	6
-Lawyer	7	7	7	7
-Politician	8	8	8	8
-does not know	9	9	9	9

47. Which mode of remuneration do you think is preferable for an engineer?

DO NOT READ

-fixed salary	1
-profit sharing according to individual output	2
-profit sharing according to the output of the work unit	3
-profit sharing according to the achievement of the enterprise	4
-do not know	5

12

C  
A  
R  
D

13

C  
A  
R  
D



- 22 -

48.	In the case of an English speaking engineer, do you consider the fact that he only speaks english an impediment to his success in Quebec?	(49)			
	Yes	1			
	No	2			
	Do not know	3			
49.	There are many ways of dividing society into groups. According to you, which one of the two following oppositions are most important to describe society? (Division of society in two groups)	(50)			
a.	- Those who have will power/those who have none	1			
	or				
	- Rich/poor	2			
b.	And of the following ones?	(51)			
	- Exploiters/exploited	1			
	or				
	- Honest people/dishonest people	2			
c.	And of the following ones?	(52)			
	- Capitalists/proletarians	1			
	or				
	- Educated people/uneducated people	2			
d.	And of the following ones?	(53)			
	- Old/young	1			
	or				
	- Manual workers/non manual workers	2			
e.	And finally of the two following ones?	(54)			
	- English speaking people/French speaking people	1			
	or				
	- City people/country people	2			
50.	Now among the ten following opposites, would you choose 3 which seem most important to you to describe society. (Code 1st choice in column (55))				
	" 2nd " " " (56)				
	" 3rd " " " (57)	(55)	(56)	(57)	
	- City people/country people . . . . .	1	1	1	
	- Manual workers/non manual workers . . . . .	3	3	3	
	- Rich/poor . . . . .	4	4	4	
	- Old/young . . . . .	5	5	5	
	- Exploiters/exploited . . . . .	6	6	6	
	- Capitalists/proletarians . . . . .	7	7	7	
	- English speaking people/French speaking people	2	2	?	
	- Honest people/dishonest people . . . . .	8	8	8	
	- Educated people/uneducated people . . . . .	9	9	9	
	- Those who have will power/those who have none. . .	0	0	0	

14  
CARD

- 23 -

51. According to you, who is the most useful to the community?

(Code 1st choice in column (58)

" 2nd " " (59)

" 3rd " " (60)

(58) (59) (60)

DO NOT READ

- |  |   |   |   |
|--|---|---|---|
| - Politicians                                | 1 | 1 | 1 |
| - Owners of important commercial enterprises | 2 | 2 | 2 |
| - Physicians                                 | 3 | 3 | 3 |
| - University professors                      | 4 | 4 | 4 |
| - Priests or clergymen                       | 5 | 5 | 5 |
| - Artists: sculptors, writers, painters      | 6 | 6 | 6 |
| - Labor union leaders                        | 7 | 7 | 7 |
| - Owners and managers of important firms     | 8 | 8 | 8 |
| - Scientists                                 | 9 | 9 | 9 |

52. (Do not write in the margin)

a. Are you in favor or against trade-unionism for engineers? (61) (62)

DO NOT READ

- |                 |       |
|-----------------|-------|
| - in favor      | _____ |
| - against       | _____ |
| - both          | _____ |
| - does not know | _____ |

b. (Do not write in the margin and put down the comments in full)

Why?

- 24 -

The following questions touch upon economic and financial information. Many are relatively difficult. If you do not know the answer, do not hesitate to say so.

53. a. i) Is the British Newfoundland Corporation (Brinco) a development company for natural resources, or a holding trust? (63)

-holding trust	1
-development	2
-no answer	3

ii) A great deal has been said recently about harnessing the Hamilton Falls. Among the following persons, could you say which two are really involved in this matter. (64)

-George Marler & Joe Smallwood	2
-Robert Winters & Jos Smallwood	1
-Jules Brillant & George Marler	3
-No answer	4

b. i) Which two following cities have an aluminium refinery? (65)

-Beauharnois and Arvida	1
-Arvida and Vallleyfield	2
-Valleyfield and Jonquière	3
-No answer	4

ii. Is the annual aluminium production in Quebec ranging about (66)

- 2 million tons	1
or	
- 4 million tons	2
- no answer	3

c. i) Of the following beer companies which two are controlled by Canadian Breweries? (67)

-Labatt and Molson	2
-Carling and Labatt	3
-O'Keefe and Carling	1
-No answer	4

ii) Canadian Breweries belongs to Argus Corporation. Is this made up of American or Canadian funds? (68)

-canadian	1
-american	2
-no answer	4

- 25 -

- d. i) Among the following persons, which are directors of the General Investment Corporation of Quebec? (69)
- Gérard Plourde and Raymond Dupuis 2
  - René Paré and Marcel Pépin 1
  - Gérard Plourde and René Paré 3
  - No answer 4
- ii) Is it true or false that the General Investment Corporation of Quebec has bought the two firms "David Lord Ltée" and "J.B. Dubé"? (70)
- true 1
  - false 2
  - no answer 3
- e. i) Shawinigan Chemicals has a few plants in Quebec. In which two of the following cities are some of its plants located? (71)
- Varennnes and Montreal 1
  - Three Rivers and Varennes 2
  - Three Rivers and Montreal 3
  - No answer 4
- / ii) Shawinigan Chemicals has changed hands following the nationalization of electricity in Quebec in 1962. It is now controlled by the Shell Company. Is this statement (72)
- true 2
  - false 1
  - no answer 4
- f. i) What is the price of gold per ounce? (73)
- \$30. 3
  - \$32. 2
  - or - \$35. 1
  - no answer 4
- ii) Is it true that the gold ratio for bank deposit in the U.S. has been reduced to less than 25% (74)
- true 1
  - false 2
  - no answer 3

- 26 -

54. When you read newspapers or magazines, what type of article interests you the most? (67) (68) (69)  
(Name three in order of preference)  
(Code the 1st choice in column (67)  
" " 2nd " " (68)  
" " 3rd " " (69)

DO NOT READ		
-Quebec politics	1	1
-Canadian politics	2	2
-International politics	3	3
-Culture (arts, literature, theater, movies)	4	4
-Finance	5	5
-Social issues	6	6
-Economics	7	7
-Sports	8	8
-Technical articles	9	9
-no answer	0	0

55. In your opinion, which of the following professional groups contribute the most to Quebec's economic growth. (Rank two in order of decreasing importance):  
(Code the 1st choice in column (70)  
" " 2nd " " (71)

DO NOT READ	
-professionals	1
-high government officials	2
-provincial ministers	3
-engineers	4
-owners of important commercial concerns	5
-scientists and researchers	6
-managers and owners of industrial enterprises	7
-federal ministers	8
-no answer	9

56. According to you, which institutions will make the most important contribution to Quebec's economic growth in the next few years: (72) (73)  
(Code the 1st choice in column (72)  
" " 2nd " " (73)

DO NOT READ	
-General investment Corporation	1
-Hydro Quebec	2
-Banks	3
-The steel industry	4
-A state agency for economic planning	5
-do not know	6

- 27 -

- |     |   |      |      |
|-----|---|------|------|
| 57. | In your opinion, what type of firm appears to be the most conducive to Quebec's economic growth:  | (74) |      |
|     | - private enterprises   | 1    |      |
|     | - semi-private enterprises  | 2    |      |
|     | - state-owned enterprises   | 3    |      |
|     | - does not know   | 4    |      |
| 58. | According to you, what sources of capital investment are preferable for the development of Quebec's economy<br>(Name 2 in order of preference)<br>(Code the 1st choice in column (75)<br>" " 2nd " " (76)   | (75) | (76) |
|     | - from Quebec   | 1    | 1    |
|     | - Canadian (outside Quebec)   | 2    | 2    |
|     | - American  | 3    | 3    |
|     | - English   | 5    | 5    |
|     | - French  | 4    | 4    |
|     | - Others  | 6    | 6    |
|     | - Does not make any difference  | 7    | 7    |
|     | - No answer   | 8    | 8    |
| 59. | Do you believe that the use of English as a technical language (read, written, spoken) in industry will always be indispensable in Quebec?  | (77) |      |
|     | Yes   | 1    |      |
|     | No  | 2    |      |
|     | No answer   | 3    |      |
| 60. | Rapid economic growth is likely to lead to social unbalance; slow growth, on the other hand, reduces the likelihood of such unbalance. In your opinion, which of these two types of economic growth is more needed in Quebec at the present time? | (78) |      |
|     | - rapid growth  | 1    |      |
|     | - slow growth   | 2    |      |
|     | - does not know   | 3    |      |
| 61. | In your opinion, do you think it is better that a country produce most of the goods it needs, or that it favor international exchanges?   | (79) |      |
|     | - own products  | 1    |      |
|     | - international exchanges   | 2    |      |
|     | - no answer   | 3    |      |



- 28 -

CARD

62. The following goals are all taken into consideration in a policy of economic growth for Quebec. It is, however, possible to give priority to some of them. Could you rank in order of preference the following goals:  
(Code the 1st choice in column (7)  
" " 2nd " " (8)  
" " 3rd " " (9)  
" " 4th " " (10)

DO NOT READ

- Increase the volume of jobs  
- Increase the productivity of existing enterprises  
- Industrialize the province of Quebec  
- The economic development of certain regions  
- No answer

123456

(7) (8) (9) (10)

1 1 1 1  
2 2 2 2  
3 3 3 3  
4 4 4 4  
5 5 5 5

63. In your opinion, what policies are most likely to foster economic growth in Quebec? (Have them answer a) before passing on to b).

a. encourage private enterprise or nationalize key industries?  
encourage private enterprise  
or  
nationalize key industries

(11)  
1  
2

b. raise tariffs or lower tariffs?  
lower tariffs  
or  
raise tariffs

(12)  
1  
2

c. reduce taxes or raise taxes?  
reduce taxes  
or  
raise taxes

(13)  
1  
2

- 29 -

64. a. Could you name 3 categories of people who, through their occupation, belong to the same social class as you? (14)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

b. Could you name 3 categories of people whose occupation place them in a social class which is inferior to yours? (15)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

c. Could you name 3 categories of people whose occupation places them in a social class which is superior to yours? (16)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

64. a. Do you think that there are groups of people whose interests are the opposite of yours? (17)

Yes (Go to b.) 1

No (Go to Q. 66) 2

b. (If so), which are they?

1. \_\_\_\_\_

2. \_\_\_\_\_

66. Would you rank these social classes according to the importance of their contribution to Quebec's economic growth, starting with the most important

(Code the 1st choice in column (19))

" " 2nd " " (20)

" " 3rd " " (21)

" " 4th " " (22)

- working class

- upper class

- middle class

- agricultural class

(19)	(20)	(21)	(22)
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4

- 30 -

67. What is, according to you, the percentage of the population which is engaged in agricultural labour, in Quebec? (23)

%

68. When there is a strike in Quebec, do you feel rather involved with the employers, rather with the workers, or not at all? (24)

employers	1
workers	2
not at all	3

69. In your opinion, which is more likely to insure the social and economic development of Quebec (25)

-a rather authoritarian regime	1
-a rather democratic regime	2

70. To evaluate a politician, for example, when one votes, should one take into account (26)

-his public life only	2
-both his public and his personal activities	1

71. What is most important to you in life? Could you rank the five choices in order of preference:

(Code the 1st choice in column (27))

20  

(	"	"	2nd	"	"	(28)
(	"	"	3rd	"	"	(29)
(	"	"	4th	"	"	(30)
(	"	"	5th	"	"	(31)

work	1	1	1	1	1
leisure	2	2	2	2	2
family	3	3	3	3	3
culture	4	4	4	4	4
income	5	5	5	5	5

72. At what income level do you think it is possible to start saving: (32)

\$5,000.	1
\$7,500.	2
\$10,000.	3
\$12,500.	4
\$15,000.	5
\$20,000. and more	6

It is always possible to save  
 -no answer

7

- 31 -

73. If you had \$100,000. at your disposal, what type of expense would take up the larger part of this sum:  
(3 in order of preference)

(Code 1st choice in column (33)

21

" 2nd " " (34)

" 3rd " " (35)

(33) (34) (35)

C
A
R
D

## DO NOT READ

-personal expenses
-real estate
-investments in industry and banking
-bonds
-insurance
-mutual funds
-speculations in mines
-found your own firm
-other (what?)

1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

74. (Do not write in the margin)

In order to consider that you have invested wisely,  
what interest rate should your capital bring:

(36)

%

75. a. How much capital would a person need to have in order  
for you to consider him wealthy:

(37)

## DO NOT READ

\$100,000.
\$100,000. to \$499,999.
\$500,000.
more than \$500,000.
does not know

1
2
3
4
5

- b. Would you say they are mostly:

(38)

22

C
A
R
D

## DO NOT READ

-financiers
-owners & managers of indus- trial concerns
-politicians
-owners of important business concerns
-professionals
-religious communities
-others (who?)

1
2
3
4
5
6
7

- 32 -

76. When you wish to buy useful things such as a car do you think it is preferable to borrow in order to buy without delay, or to wait until you have saved the amount (39)
- |                                |   |
|--------------------------------|---|
| -borrow for immediate purchase | 1 |
| -wait for savings              | 2 |
| -does not know                 | 3 |
77. In your opinion do riches bring:  
(Rank in order of preference)  
(Code the 1st choice in column (40)  
" 2nd " " (41)  
" 3rd " " (42)  
" 4th " " (43)
- |   | (40) | (41) | (42) | (43) |
|---|------|------|------|------|
| -worries                                | 1    | 1    | 1    | 1    |
| -power                                  | 2    | 2    | 2    | 2    |
| -possibility to acquire expensive goods | 3    | 3    | 3    | 3    |
| -confirmation of personal worth         | 4    | 4    | 4    | 4    |
78. What do you think is more desirable for a sixty year old "entrepreneur" who has been rather successful: (44)
- |  |   |
|--|---|
| -that he continue to work to keep his firm thriving        | 1 |
| -that he retire in order to enjoy the fruits of his labour | 2 |
| -no answer   | 3 |
79. a. Do you feel that there are differences between English and French Canadian business men: (45)
- |                          |   |
|--------------------------|---|
| -yes (go to b.)          | 1 |
| -no (go to Q. 80)        | 2 |
| -no answer (go to Q. 80) | 3 |

- 33 -

- b. (Do not write in the margin)  
 (If so,) what are they:

(46)

---



---



---



---

80. Some say that the success of the American Society relies upon intense competition, thus leading the fittest to the top. Others underline the fact that such competition creates excessive social inequalities, and favor a more equilitarian system.

Which of these two propositions seems preferable to you? (47)

- |                            |   |
|----------------------------|---|
| - intense competition      | 1 |
| - more equalitarian system | 2 |
| - no answer                | 3 |

81. In your opinion, is it preferable that the owner of a firm who has three sons: (48)

Leave his firm to the three of them

or

Leave it to one of them while giving the others the means to make a good living elsewhere

- |                     |   |
|---------------------|---|
| - to the three sons | 1 |
| - to one of them    | 2 |
| - no answer         | 3 |

82. Given the psychology of subordinate personnel in your own environment, in the end what yields better results?

a) with office employees (49)

- |                    |   |
|--------------------|---|
| - tolerant command | 2 |
| - firm command     | 1 |
| - no answer        | 3 |

b) with workers (50)

- |                    |   |
|--------------------|---|
| - tolerant command | 1 |
| - firm command     | 2 |
| - no answer        | 3 |

83. (Do not write in the margin)

- a. When you consider the scale of salaries in Quebec, do you feel that the disparity between salaries is narrowing or widening? (51)

- |             |                          |
|-------------|--------------------------|
| - narrowing | <input type="checkbox"/> |
| - widening  | <input type="checkbox"/> |
| - no answer | <input type="checkbox"/> |



- 34 -

b. Do you believe it is a good thing or that the contrary would be preferable ?

- good thing ☐
- contrary would be preferable ☐
- no answer ☐

84. According to you, what is the most normal attitude toward income tax regulations: (52)

- strict observance 1
- maximum exploitation of the loopholes 2
- get away with the least possible expenses 3
- does not know 4

85. According to you, what length of yearly holidays is normal for a middle-aged engineer: (53)

DO NOT READ

- |                    |   |
|--------------------|---|
| -1 week            | 1 |
| -2 weeks           | 2 |
| -3 weeks           | 3 |
| -4weeks            | 4 |
| -5 weeks           | 5 |
| -6 weeks           | 6 |
| -more than 6 weeks | 7 |
| -no answer         | 8 |

86. According to you are leisure activities: (54)

- rather for a good time 1
- rather for a necessary rest in order to do a better job 2

87. Do you ever watch or listen to French radio or television programs: (55)

- often 1
- sometimes 2
- never 3
- no answer 4

88. (Do not write in the margin)  
What are the main papers and magazines you read:

(Note down the names)

a) among dailies (56)

- 35 -

b) among weeklies	(57)
_____	
_____	
_____	
_____	
c) among monthly reviews of information	(58)
_____	
_____	
_____	
_____	
d) among monthly or other journals of opinion	(59)
_____	
_____	
_____	
_____	
e) among technical publications	(60)
_____	
_____	
_____	
_____	

89. From what countries do your favorite films come? (Name two.)  
(Code the 1st choice in column (61)  
" 2nd " " (62)

DO NOT READ	
-U.S.A.	
-England	
-France	
-Italy	
-Elsewhere	
-never goes and never watches any on television	

(61)	(62)
4	4
2	2
1	1
3	3
5	5
6	6

- 36 -

90.	(Do not write in the margin but note all the names down)		
a)	Of which social clubs are you a member?	(63)	
	In which ones are you active?		
b)	Of which private clubs are you a member?	(64)	
	In which ones are you active?		
c)	To what other associations do you belong?	(65)	
	In which ones are you active?	(66)	(67)
91.	Do you believe that in your profession, women are fit to assume important functions in industry?	(68)	
	Yes	1	
	No	2	
	no answer	3	

- 37 -

92. a. According to you what is the ideal number of children in a family? (69)

1	1
2	2
3	3
4	4
5	5
6 +	6
none	7
no answer	8

b. There are numerous debates on birth control; do you consider this measure desirable in Quebec? (70)

yes	1
no	2
no answer	3

93. a. Would you prefer your children to attend a primary school that serves a mixture of types of residential districts or would you prefer that they attend a school where they would meet children of a background similar to their own? (71)

-mixture of residential districts	1
-similar background	2
-no preference	3

b. Would you prefer to send your children to English speaking or French speaking schools? (72)

DO NOT READ

-English	2
-French	1
-both	3
-no answer	4

94. In what field would you like to see your son pursue his studies, assuming he is able and willing to do it (without pressure on your part). (73)

DO NOT READ	
-engineering	1
-medecine	2
-science	3
-social sciences	4
-law	5
-business administration	6
-other faculties giving a technical training	7
-other faculties	8
-no answer	9

95. a. At what age would you allow your daughter to go out alone at night? (74)

Note down the age: \_\_\_\_\_

b. At what age would you allow your son to go out alone at night? (75)

Note down the age: \_\_\_\_\_

96. What would you say is most important to teach a child, in order to prepare him for life?  
(Rank in order of preference the four choices)  
(Code the 1st choice in column (76)

"	"	2nd	"	"	(77)				
"	"	3rd	"	"	(78)				
"	"	4th	"	"	(79)	(76)	(77)	(78)	(79)
-to work hard						1	1	1	1
-to help others when they need it						2	2	2	2
-a sense of thrift						3	3	3	3
-respect for authority						4	4	4	4

- 39 -

	1	2	3	4	5	6
97. a. At the moment, do you think of yourself as belonging to a church?						4
		(7)				
Yes (Go to b. etc...)		-				
No (Go to d.)		1				
b./ (If yes), which one?						
DO NOT READ						
-roman catholic		2				
-anglican		3				
-baptist		4				
-presbyterian		5				
-United church		6				
-Greek orthodox		7				
-Jewish		8				
-other (which)		9				
c. Would you say that you practice:		(8)				
-regularly		1				
-most of the time		2				
-rather often		3				
-rarely		4				
-never		5				
(Go to Q.-98)						
d. (If no), Would you say that you are:		(9)				
-a non-believe		1				
-a believer without a religion		2				
-an atheist		3				
-an agnostic		4				
98. (Do not write in the margin)						
If you think of a person you particularly admire what are the principal qualities you see in him: (Name two)		(10)				
1. _____						
2. _____						
99. a. (Do not write in the margin)						
What are the occupations of your three best friends?		(11)	(12)	(13)		
1. _____						
2. _____						
3. _____						



- 40 -

b.	Are they English/canadian?	(14)
	DO NOT READ	
	3 English canadians	9
	2 English canadians/1 French Canadian	4
	2 English canadians/1 neo canadian	5
	2 French canadians/1 English canadian	2
	2 French canadians/1 Neo canadian	3
	2 Neo canadians/1 English canadian	7
	2 Neo-Canadians/1 French canadian	6
	1 English canadian/1 French can./1 neo can.	8
	3 French canadians	1
c.	Do you associate socially with a number of persons who are not English Canadian?	(15)
	yes	1
	no	2
100.a.	Do your father and mother or your father and mother in-laws live within a radius of 100 miles from Montreal?	(16)
	yes	1
	no	2
	all deceased (go on to c.)	3
b.	Do you see any of them:	(17)
	-every week	1
	-2 or 3 times a month	2
	-once a month	3
	-a few times a year	4
	-once a year	5
	-less frequently	6
	-no answer	7
c.	Do any of your brothers and sisters or brothers and sisters in-law live within a radius of 100 miles from Montreal?	(18)
	-yes	1
	-no	2
	-all deceased (Go to e.)	3
d.	Do you see any of them:	(19)
	-every week	1
	-2 or 3 times a month	2
	-once a month	3
	-a few times a year	4
	-once a year	5
	-less frequently	6
	-no answer	7

- 41 -

e. Do any of your uncles, aunts or cousins live within a radius of 100 miles from Montreal?

(20)

Yes  
No  
All deceased  
(Go to A. 101)

1  
2

f. Do you see any of them:

(21)

- every week  
- 2 or 3 times a month  
- once a month  
- a few times a year  
- once a year  
- less frequently  
- no answer

1  
2  
3  
4  
5  
6  
7

23

CARD

Q.101.a. Among individuals having the following characteristics to whom would you prefer to see your daughter married, keeping in mind that you leave her absolutely free in her choice? (RANK FROM 1 TO 6)

	Professional	White collar	Skilled Worker
English canadian			
French canadian			

b. Same question (RANK FROM 1 TO 6)

	Protestant	Catholic	No religion
English canadian			
French canadian			

c. Same question (RANK FROM 1 TO 9)

	Protestant	Catholic	No religion
Professional			
White collar			
Skilled worker			

- 42 -

102.   Quebekers belong to different societies; to which  
         of the following would you say you belong, by order  
         of importance:  
         (Code the 1st choice in column (71)  
             "       2nd       "       "       (72)  
             "       3rd       "       "       (73)  
             "       4th       "       "       (74)

-Canadian	1	1	1	1
-North American	2	2	2	2
-English Canadian	5	5	5	5
-English speaking	6	6	6	6

103.   If you were to live somewhere else outside Quebec, where  
         would you go? (2 choices)  
         (Code the 1st choice in column (75)  
             "       2nd       "       "       (76)

-elsewhere in Canada	1	1
-USA	2	2
-England	4	4
-France	3	3
-elsewhere in Europe	5	5
-elsewhere	6	6

104.   (Do not write in the margin)

According to you, what are the three most important problems  
in Quebec at the present time?

(77)	(78)	(79)
1. _____		
2. _____		
3. _____		



Documents  
of the Royal Commission  
on Bilingualism  
and Biculturalism

# 7 Education and Economic Achievement



Donald E. Armstrong









Education and  
Economic Achievement

Documents of the  
Royal Commission on  
Bilingualism and  
Biculturalism

---

- |   |                               |  |
|---|-------------------------------|--|
| 1 | Peter H. Russell              | <i>The Supreme Court of Canada as a Bilingual and Bicultural Institution</i> |
| 2 | Thérèse Nilski                | <i>Conference Interpretation in Canada</i>                                   |
| 3 | David Hoffman and Norman Ward | <i>Bilingualism and Biculturalism in the Canadian House of Commons</i>       |
| 4 | Donald V. Smiley              | <i>Constitutional Adaptation and Canadian Federalism Since 1945</i>          |
| 5 | Robert N. Morrison            | <i>Corporate Adaptability to Bilingualism and Biculturalism</i>              |
| 7 | Donald E. Armstrong           | <i>Education and Economic Achievement</i>                                    |

*To be published*

---

- |                  |  |
|------------------|--|
| Jacques Dofny    | <i>Les ingénieurs canadiens-français et canadiens-anglais à Montréal</i> |
| Monique Mousseau | <i>Analyse des nouvelles télévisées</i>                                  |

Documents  
of the Royal Commission  
on Bilingualism  
and Biculturalism

---

# Education and 7 Economic Achievement

---

Donald E. Armstrong

---

---

*This document has been prepared for the Royal Commission on Bilingualism and Biculturalism. Although published under the auspices of the Commission, it does not necessarily express the Commission's views.*

Crown Copyrights reserved

Available by mail from  
Information Canada, Ottawa,  
and at the following  
Information Canada bookshops:

*Halifax*

1735 Barrington Street

*Montreal*

1182 St. Catherine Street West

*Ottawa*

171 Slater Street

*Toronto*

221 Yonge Street

*Winnipeg*

Mall Center Building, 499 Portage Avenue

*Vancouver*

657 Granville Street

or through your bookseller

Price \$1.25 (subject to change without notice)

Catalogue No. Z1-1963/1-2/7

Information Canada  
Ottawa, 1970



List of Tables vi

List of Figures vii

Chapter I Introduction 1

Chapter II Labour Force Productivity and Income Achievement 5

Chapter III Professional Education and Achievement 21

A Introduction 21

B Architects 23

C Science Graduates 27

D Engineers 38

E Ethnicity and Professional Achievement 50

F A Tentative Conclusion 57

Chapter IV Managerial Achievement 59

A Social Significance of Managerial Achievement 60

B Management Achievement Ratios 62

C Managerial Achievement of Architects, Scientists,  
and Engineers 73

Architects 73

Scientists 74

Engineers 74

Chapter V Summary and Conclusions 91

Notes to Chapters 99

## List of Tables

## Tables in Chapter II

- II.1 Personal income per person and per member of the labour force by province, 1964 6
- II.2 Relative earnings of Quebec and Ontario, and of Quebec and Canada 7

## Tables in Chapter III

- III.1 Number and average salary of French and other science majors graduating prior to 1940 28
- III.2 Graduates of French-language universities working in Ontario compared with graduates of other universities 33
- III.3 Graduates with Master's or *licence* degrees working in Quebec who obtained undergraduate degrees at French-language universities compared with Master's graduates from other universities 34
- III.4 Graduates with Ph.D. degrees working in Quebec who obtained undergraduate degrees at French-language universities compared with doctoral graduates from other universities 35
- III.5 Graduates with Master's or *licence* degrees working in Ontario who obtained undergraduate degrees at French-language universities compared with Master's graduates from other universities 37
- III.6 Graduates with Ph.D. degrees working in Ontario who obtained undergraduate degrees at French-language universities compared with doctoral graduates from other universities 37
- III.7 The professional "mix" of engineers who graduated before 1940 40
- III.8 Engineering graduates at the Bachelor level of French-language universities working in Ontario compared with graduates of other universities 49

## Tables in Chapter IV

- IV.1 Managerial achievement ratios in Quebec for those earning \$10,000 and over per year 62
- IV.2 Managerial achievement ratios in Canada, excluding Quebec, for those earning \$10,000 per year and over 63

- IV.3 Educational distribution of executives occupying top positions, by highest level of education attained and by size of firm, in Canada 65
- IV.4 Expected distribution of managers in Quebec by ethnicity based on random selection 67
- IV.5 Refined managerial achievement ratios in Quebec for those earning \$10,000 and over per year 69
- IV.6 Distribution of 306 executives by language, level, and kind of education 71

## List of Figures

### Figures in Chapter III

- III.1 Professional achievement of university graduates in Quebec, Bachelor level: Architecture 24
- III.2 Professional achievement of university graduates in Quebec, Bachelor level: All science 26
- III.3 Professional achievement of university graduates in Quebec, Bachelor level: Chemistry 30
- III.4 Professional achievement of university graduates in Quebec, Bachelor level: General science 31
- III.5 Professional achievement of university graduates in Quebec, Bachelor level: Engineering (all branches) 39
- III.6 Professional achievement of university graduates in Quebec, Bachelor level: Civil engineering 41
- III.7 Professional achievement of university graduates in Quebec, Bachelor level: Chemical engineering 42
- III.8 Professional achievement of university graduates in Quebec, Bachelor level: Electrical engineering 43
- III.9 Professional achievement of university graduates in Quebec, Bachelor level: Mechanical and industrial 44
- III.10 Professional achievement of university graduates in Quebec, Bachelor level: Mining and geological 45
- III.11 Professional achievement of university graduates in Quebec, Bachelor level: Metallurgical 46
- III.12 Professional achievement of university graduates in Quebec, Bachelor level: All engineering 48

- III.13 Professional achievement of university graduates in Quebec, Bachelor level, 1962 and 1964 surveys: Engineering (all branches) 53
- III.14 Professional achievement of university graduates in Quebec, Master's level, 1962 and 1964 surveys: Engineering (all branches) 54

#### Figures in Chapter IV

- IV.1 Management achievement of university graduates in Quebec, Bachelor level: Architecture 75
- IV.2 Management achievement of university graduates in Quebec, Bachelor level: All science 76
- IV.3 Management achievement of university graduates in Quebec, Bachelor level: "Other courses" in science 77
- IV.4 Management achievement of university graduates in Quebec, Bachelor level: Engineering (all branches) 79
- IV.5 Management achievement of university graduates in Quebec, Bachelor level: Civil engineering 80
- IV.6 Management achievement of university graduates in Quebec, Bachelor level: Chemical engineering 81
- IV.7 Management achievement of university graduates in Quebec, Bachelor level: Electrical engineering 82
- IV.8 Management achievement of university graduates in Quebec, Master's level: All engineering 86
- IV.9 Management achievement of French-language university graduates in Ontario, Bachelor level: All engineering 87
- IV.10 Management achievement of French-language university graduates in Ontario, Bachelor level: All engineering and science 88
- IV.11 Professional achievement of university graduates in Quebec, M.B.A. and Ph.D. levels: Engineering (all branches) 89

The purpose of this study is to examine the relationship between education and economic achievement. If this relationship can be established, it will be interesting in itself for a number of reasons; but for the particular purpose of this study, attention must be more narrowly focused on the role of education in explaining the relative achievement in commerce and industry of Canadians of different language groups.

The study here proposed is beset by more than the usual number of conceptual and measurement problems. One realizes very quickly that even the terms used in the title of this study, "education" and "achievement" are themselves difficult to define or measure. For lack of a better measure of education, we shall have to use years of formal schooling, but everyone who has ever been remotely connected with an educational institution knows that education neither begins nor ends with the formal educational programmes of schools and universities. Furthermore, educational institutions vary greatly in the qualifications of their teachers, the number of stimulating books in their libraries, the quality of their curricula, and the relevance to the world of commerce and industry, of what is taught.

Achievement is even more difficult to define or measure. Obviously it can be assessed only in relation to an agreed yardstick or goal, but in the realm of education the available yardsticks are many, uncalibrated and subjective. The actual, though perhaps the unstated, objectives of a school system might be to make sure that students continue to follow a particular religious faith, to cause the taxpayers a minimum of inconvenience, to discourage bilingualism, or to perpetuate the skills, attitudes and prejudices of the parents. If judged against some or all of these goals, the school system might be very successful. However, goals vary from person to person so that some people might regard such a school system as a complete failure because its students do not achieve other objectives such as high incomes or rapid promotions in industry.



This study is concerned with achievement in a materialistic sense. Our main concern is with income, productivity, and promotion. However, it must be conceded immediately that there is no way of proving that these are the most important aspects of achievement or the ones by which an educational system should be judged. The justification for looking at the materialistic aspects of achievement is the belief that French-speaking and English-speaking Canadians both aspire to higher incomes and better jobs whether their educational systems take these factors into account or not. We may further justify our examination of the materialistic aspects of achievement by the belief that the difference in per capita income between French- and English-speaking Canadians is large enough to be perceived and to be a source of friction and resentment. It seems important therefore to understand the reasons for apparent differences in income and promotion.

Another problem in considering achievement is that usually it is a relative term. Achievement may be judged by comparing one group or individual with another at one point of time, or it may be applied to the same group or individual at two points of time. Or again, the achievement of an individual or group may be measured against one or more objectives which, of course, may include the aim of doing as well economically as some other group, or increasing one's well-being relative to the past.

The fact that achievement may be measured against one or more objectives raises the interesting possibility that a single objective may not be in the range of the possible, or that two or more objectives may be mutually incompatible. For example, if an English-speaking Canadian wishes to remain unilingual and at the same time to achieve a high income by selling brushes door to door in Quebec City, he is doomed to disappointment: achieving one or the other of his goals is going to be very difficult. Unilingualism, which could easily be a goal of some English- and French-speaking Canadians (a goal which is itself an aspect of educational policy) may very well prove to be incompatible with certain other objectives.

In the study of achievement in education, it is virtually impossible to avoid making value judgments. The facts that are collected and the questions that are asked usually reflect an underlying set of assumptions or attitudes. The members of group A, for instance, might complain that they are under-represented in management in comparison with group B. It might be quite possible to "prove" this fact by counting heads and comparing the number of A's and B's in top management with the number of A's and B's in the total population. If one made such a count, however, one would in fact be implying that groups A and B have the right to expect proportional representation in management (as they would in Parliament perhaps) without reference to qualifications. To take the position that A's and B's should have equal representation in management regardless of qualifications, or, on the contrary, that membership in A or B should be completely ignored and that only qualifications should be considered, is to make a



value judgment. Obviously in the matter of running a parliament, few are prepared to admit that the educational qualifications of political candidates are the only consideration, although it is of course hoped that constituents will elect candidates with good qualifications. In running a government administration or staffing the courts of justice, quite different emphasis may be placed on educational qualifications. On the other hand, it may be argued that the sole job of business management is to be efficient, and that if membership in A or B is irrelevant to the quality of management, then membership in A and B should be completely ignored in making appointments.

It is possible to envisage conflicts about measurement involving representation versus qualifications, but indeed even if one chooses a goal of equal representation for two or more groups, one can still not completely avoid qualifications since qualifications or attributes are essential to the definition of any group. Should we compare the ratio of French- and English-speaking Canadians in management with the ratio of these two groups in the total population? Or should we define the groups to include only the adult population or the working population, and should this include or exclude people in the church? Should the groups to be compared be so defined as to include those over a certain age and with a certain educational background? One can very quickly see that the problem of making "fair" comparisons must be, to some extent at least, subjective.

Need it be added that the more precise our definition of the group, the less reliable our data? It is one thing to define and to measure income achievement of all French- and English-speaking Canadians, but if one's idea of fairness directs one to compare the achievement of two groups of French-speaking and English-speaking Canadians, each of which has equal facility in a second language, each of which has the same quantity and quality of education, the same personal aspirations, the same set of values as far as business is concerned, and so on, then one is going to have a hard time identifying the groups, let alone measuring their relative achievement.

Both a value judgment and a measurement problem arise with the introduction of time and history into the analysis. The dead hand of the past lies heavily on us all. The workman's son will have a harder time becoming president of the Canadian Pacific Railway than the doctor's son; and undoubtedly if the workman is unilingual French living in Saint-Tite-des-Caps, his son will find the goal more difficult to achieve than if the workman were unilingual English living in Toronto. Class, income, and regional mobility exist in North America, but even so it usually takes strong motivation and a few generations to move from a subsistence farm to the executive suite.

A region, a family or an individual, whether French- or English-speaking, must live with a given stock of education, attitudes, accumulated wealth and goals, and these will not be changed overnight, regardless of how badly society wants change.

Many other problems confuse and complicate this study. It attempts to single out the impact of education on achievement and yet many other explanatory variables are obviously involved. Furthermore the whole area of education and achievement may bring forth an emotional reaction on the part of interviewees which may or may not affect practice and policies. Finally it must be noted (in self-defence) that there is an absence of a research base in this area—especially in Canada. There are, unhappily, very few shoulders on which we can stand to improve our view of the countryside.

It is a matter of national concern that levels of income and productivity are not the same across Canada. This is only one aspect of a much larger problem which leads us to ponder the reasons why there are "have" and "have not" nations and why, in comparison with the United States at least, Canada is a "have less" nation.

For purposes of this particular study, it is the difference between English- and French-speaking Canadians which concerns us, but because of the way data are collected, it is not always possible to distinguish income and productivity levels of French- and English-speaking Canadians, and some of our analysis must therefore deal with differences among provinces. In this chapter we shall attempt to describe very briefly income differences and to put the problem in perspective.

Our analysis focuses on the fact that there is a significant income difference between Quebec and Ontario and that this difference has not diminished over time—at least it has not diminished very much. This fact is surprising because there exist in any free-trading area strong economic forces which should tend to equalize wage rates. With this in mind we shall examine two possible explanations for the failure of Quebec to achieve the same income levels as Ontario. The first is that there may be some kind of ethnic prejudice which holds back the French Canadians, and the second, that the persistent differences in income are explained by equally persistent differences in educational and productivity levels. Table II.1 shows all provinces ranked in order of per capita personal income in 1964. It also shows the income per member of the labour force. From this table it can be seen that the income and productivity achievement of Quebec places it in about the middle of the Canadian provinces, though below the mean. If the view from Quebec looking toward the greener pastures of the West is discouraging, a Quebecer can always draw comfort from a glance over the back fence at his eastern neighbours.

Table II.1

Personal income per person and per member of the labour force by province, 1964

Province	Personal income per person <sup>1</sup>	Personal income per member of the labour force <sup>2</sup>
Ontario	\$ 2,125	\$ 5,476
British Columbia	2,079	5,656
Manitoba	1,796	4,901
Alberta	1,793	
Saskatchewan	1,683	
Quebec	1,608	4,585
Nova Scotia	1,362	4,180
New Brunswick	1,246	
P.E. Island	1,224	
Newfoundland	1,065	

<sup>1</sup>Source: D.B.S. *National Accounts, Income and Expenditure 1964* (Ottawa, 1965), Table 29.

<sup>2</sup>Source: D.B.S. *National Accounts, Income and Expenditure 1964* (Ottawa, 1965), Table 28. D.B.S. *The Labour Force* (Supplement to March 1965 Report).

Of all the comparisons that might be made as a reference point for productivity and income achievement, the one which has been singled out in this section is that of Ontario and Quebec. The two provinces are neighbours; they are both large and centrally located to serve the Canadian market. Both provinces have long-established and highly developed manufacturing industries, similar natural resources and similar resource-based industries. Finally, one province is about as English-speaking as the other is French-speaking.

Another very good reason for making this comparison is that Professor André Raynauld in his book, *Croissance et structure économiques de la province de Québec*<sup>1</sup>, has already set out the relevant facts. Very briefly, Professor Raynauld shows that for about as far back in time as available statistics permit us to go, income in Quebec has been below that of Ontario, and also below the Canadian average. His figures are reproduced in Table II.2 with the addition of figures for the period 1959 to 1964.

This table suggests that there is a slight tendency for Quebec to catch up to Ontario but it is not obvious that the gap between Quebec and the Canadian average is narrowing. It is the similarity of growth rates and the consistency of the gap in productivity and income that catch the eye, rather than the changes in the relative positions of Quebec and Ontario or of Quebec and Canada.

Table II.2

Relative earnings of Quebec and Ontario, and of Quebec and Canada

	Quebec as percentage of Ontario	Quebec as percentage of Canada
Personal income per person		
1926-31	74.25	89.12
1935-39	71.86	90.15
1953-58	72.25	85.84
1959-64	74.15	86.86
Personal income per worker		
1935-39	77.99	93.32
1953-58	81.35	88.27
1959-64	82.10	89.23
Wages, salaries and other income per worker		
1935-39	79.26	96.33
1953-58	80.80	91.93
1959-64	82.25	93.22
Average hourly earnings in manufacturing		
1938-39	80.8	87.5
1955-57	84.0	90.2

The behaviour of relative wages in Ontario and Quebec is surprising because on theoretical grounds it has long been argued that so long as there is free trade between two regions, the prices paid to the factors of production, that is, to labour and capital, should tend to equalize even if the factors of production are not themselves free to move. In other words so long as Ontario and Quebec can exchange goods freely with each other and can exchange goods with the rest of the world on equal terms, we should expect that in time wage rates in the two provinces would tend to become equal. This tendency would be strongly reinforced of course by the freedom of labour to move to the regions in which there was the highest rate of pay.

Without bothering with the more general and, in a sense, more theoretical, case, we can quite easily see why wage rates in Ontario and Quebec should tend to equality *so long as the average worker in Quebec is as productive as the average worker in Ontario*, and so long as the distribution of skills and abilities is approximately the same in the two provinces.

The importance of the assumption that the labour force in the two provinces is similar cannot be too strongly stressed. Income is absolutely dependent on productivity, which is simply to say that the



goods and services available for distribution to workers, including managers cannot possibly be greater than the goods and services which the workers themselves produce. If workers in Quebec or Newfoundland or any other province are less productive, their wages must inevitably be less. Factor price equalization (here the equality of wage rates) is likely to come about only if the factors—such as the workers being equally productive—are indeed the same.

Let us suppose that throughout our history all Quebec workers were just as productive as workers in Ontario but that, as we know, wage rates were lower in Quebec. Could this condition persist? A moment's reflection would indicate that it could not. Suppose two competing manufacturing plants, one in Ontario and one in Quebec, sold the same product in a national or an international market. The market price of the product from the two plants would have to be the same, and, depending on the location of the market in relation to the plant (that is, depending on the relative transportation charges), the price back at the plant would be nearly so. Since there is a single capital market in Canada, the terms on which money can be obtained would be the same, and there is no reason to imagine that available technology would be any different in the two cases. Nor would raw material prices or power or energy costs be very different. In short, apart from the difference in wages which we have assumed, all other costs should be about the same. If under these circumstances, however, wage rates were 10 per cent lower in Quebec, the Quebec plant would initially be more profitable in absolute terms by an amount equal to 10 per cent of the wage bill. Such an amount of additional profits would of course make the Quebec location much more attractive than the location in Ontario.<sup>2</sup>

Over time, therefore, new plants would tend to be located in Quebec rather than in Ontario, and in response to normal market growth, the established Quebec plants would expand well before those in Ontario. Under the circumstances we have assumed, manufacturing in Quebec should grow considerably faster than in Ontario, and the additional demand for Quebec labour should in time bring Quebec wages up to the Ontario level at which point there would be no incentive to shift manufacturing activity to Quebec.

As Professor Raynauld has already discovered, industrial growth in Quebec has not been significantly higher than that in Ontario, and as we can see from the previous table, wages have not equalized. Professor Raynauld examines five factors which might explain the failure of wages in Quebec to be as high as those in Ontario: population growth, technology, scale of operations, competition in the labour market, and unionism. Without going into these matters as deeply as does Professor Raynauld, one could agree that more rapid population growth in Quebec, inferior technology, smaller scale of operations, less competition for labour, or fewer or weaker unions, might very well have a depressing effect on wages in Quebec, and any one of these factors might explain why, initially at least, wages in Quebec would



be lower than those in Ontario, even when labour productivity in the two regions was the same. However, none of these factors should be able to prevent the economic forces described above from accelerating the economic growth of Quebec and from bringing wage rates in Ontario and Quebec into line. Moreover, since the war at least, the population of Quebec has not grown faster than that of Ontario. The same technological know-how or effective knowledge is available to investors whether they locate in Ontario or Quebec; and even if originally Ontario plants were bigger than those in Quebec and had therefore advantages of larger scale, once entrepreneurs realized that with the same equipment Quebec workers were just as productive as, but less expensive than their colleagues in Ontario, they would be led to build new big plants in Quebec rather than in Ontario, and they would have the incentive to enlarge the Quebec rather than the Ontario plant. Finally, even if Quebec unions were weaker or less militant than those in Ontario, one would expect this to be yet another factor encouraging the movement of manufacturing activity to Quebec. Not only would wages be lower, but also with weaker unions managers would find it easier to reduce costs by introducing changes, new technology and so on.

Incidentally even if there were evidence that strong unions in some industries in Quebec had succeeded in narrowing the gap in wages between the two provinces, this evidence would not be inconsistent with our hypothesis that training and education, not unionization, explain overall productivity and wage rates.

If some Quebec unions succeeded in obtaining the Ontario wage scale, the management in these unionized industries should be more successful over time in attracting the relatively scarce supply of better-educated workers in Quebec. These better-educated workers would in turn be more productive and earn the higher wages paid by that industry. Of course the implication of raising the productivity and educational level of the unionized industries is that the average productivity and educational level of other industries would be correspondingly lowered. Unions are not likely to change the total "stock" or accumulation of education in a province. On the other hand if unions raised wages without raising productivity in a few Quebec industries, such industries would simply shift over time to a region where education and productivity were higher but wages the same.

The same sort of reasoning could account for Professor Raynauld's observation that as the size of the plant increases, the difference in productivity between Ontario and Quebec tends to narrow. Large plants probably find it easier to attract better educated people (especially if they pay more money) than do small plants.

It must be allowed that the productivity of the total labour force may reflect the education and productivity of managers rather than of workers. The difference in income levels between Ontario and Quebec therefore might be attributed to differences in managerial competence. This is a hypothesis which requires further study and about which

little can be said at this time. However, it may be observed that national and international companies are relatively free to move their managers from city to city and, in time, one would expect corporations to move competent managers to locations where the gains were greatest. Given low wages and average worker productivity in Quebec, one would expect large companies to make sure that they supplied their Quebec plants with at least average management so that the full profit potential in Quebec could be exploited. Such a common-sense policy would again make Quebec an attractive place to invest (provided managers of average competence could be supplied) and once again growth in Quebec should outpace growth in Ontario.

In brief, it is not at all difficult to accept the fact that there are a number of plausible arguments which might explain why in 1867 or 1926, say, wage rates in Quebec might be below those in Ontario. It is very difficult, however, to see why the powerful economic pull of lower wage costs per unit of output would not attract industrial activity to Quebec at a sufficient rate to produce a rate of growth higher than that of Ontario. Within a human generation (which means several generations of capital) one would expect a rational allocation of investment to produce equality of wage rates between two such similar free-trading neighbours.

The failure of incomes in Ontario and Quebec to become equal may be explained in one of three general ways. In the first place it might be argued that for any one of a number of reasons labour in Quebec is not as productive as labour in Ontario; that is to say, we are not dealing with exactly the same factor of production when we compare the average member of the work force in Ontario with his counterpart in Quebec. We shall return to this point shortly. The second possibility is that the work forces in Ontario and Quebec are equally productive but the managers may perceive imaginary differences and therefore pay less to Quebec workers. In other words the management class in Quebec may hold prejudiced, or at any rate inaccurate, views about the productivity of the Quebec work force. The third possibility is that while managers in Quebec know that Quebec workers are as productive as those in Ontario, they have conspired to pay lower wages in that province.

The last point is perhaps the easiest to deal with. In this regard we must remember that while wages and salaries in Quebec are below those in Ontario, they are higher than those in the Maritimes. To explain lower wages in Quebec by an ethnic conspiracy in which the managing Anglo-Saxons conspired against the French Canadians would invite the conclusion that the white Anglo-Saxon Protestants of the Maritimes and the Prairies are also the victims of a similar conspiracy. Only a fairly excited regionalist would seriously give a second thought to such a theory, but in any event we should point out that even if the will existed to establish such a conspiracy by one group or one province, it simply would not work. If productivity in Quebec were in fact equal to that in Ontario, while wages were lower, it would follow that profits in Quebec would be higher than the

profits of those companies located in Ontario. Therefore new firms or old firms planning to expand, would prefer Quebec locations to those in Ontario. It would also follow that with respect to investment, economic growth and the demand for labour, Quebec would soon outstrip Ontario, and the increased demand for labour in Quebec would produce higher wages in that province. If the conspiracy were to work, therefore, businessmen would have to have some machinery for preventing each other from taking advantage of a favourable Quebec location. Investment in Quebec would have to be rationed among the conspirators, and the right to locate or expand in Quebec would become a valuable asset.

The conspiracy indeed would have to include French Canadian businessmen so that they would not expand at the expense of English Canadian businessmen or foreign businessmen who are either in Quebec or are in a position to invest in that province. This argument, however, has been pursued long enough to demonstrate that a conscious business policy of ethnic exploitation of the workers of any one region or province is exceedingly unlikely.

While we can rule out a conscious and collective conspiracy, we cannot of course rule out the possibility that individuals, perhaps even a large number of individuals, are prejudiced or have erroneous views about the productivity of the Quebec labour force. Let us consider this matter further.

If the work forces in Ontario and Quebec were in fact equally productive, while in the minds of the managers (at least the English-speaking managers) the French Canadian labour force was considered less productive, it is possible to imagine that the managers would try to pay French Canadian workers lower wages. Let us suppose that because of a temporary excess of supply this policy could be pursued and that, as in the previous case, average wage rates in Quebec were below those in Ontario. As before, Quebec would become known as a more profitable place to locate than Ontario, even though initially managers might be at a loss to explain why. In any event Quebec industry would be rewarded, and in time the demand for labour in Quebec would increase and wages would tend to rise towards the Ontario level. But on the basis of this simple analysis it is hard to imagine that such a widespread misconception concerning productivity could exist year after year, especially since people at the management level tend to be quite mobile between provinces, and on the basis of their own experience would correct any such misconception.

The reason we have raised the question of prejudice is not because we think there is no prejudice in Canada. Such an assumption would be absurd. It is thought, however, that prejudice in the form of a widely-held misconception about productivity could not be the main explanation of the persistent tendency for the work force in Quebec to continue to earn less than the work force in Ontario. It is necessary, therefore, to examine the proposition that the labour forces in the two provinces are not in fact equally productive.



It is our hypothesis that Quebec labour is not generally as productive as labour in Ontario and that the main explanation is to be found in the quantitative and perhaps also in the qualitative differences in education in the two provinces. While the main emphasis will be on education, it must of course be recognized that labour productivity may be affected by other factors. One individual may be more effective or more productive than another for a number of reasons. In the first place he may have higher native intelligence. While this factor may be quite important in explaining the relative achievement of any two individuals, it is not likely to explain the difference between two large groups of people with such a similar racial background as those in Ontario and Quebec.

Another possible explanation is that there are cultural differences between French- and English-speaking Canadians which may affect their attitudes to work. These attitudes may, in turn, affect the amount of effort that workers are willing to put into their jobs, and their willingness to cooperate with their fellow workers and their managers.

A study by G. A. Auclair and W. H. Read<sup>3</sup> has established that cultural differences do exist between French- and English-speaking managers. Moreover, since these differences exist at upper, middle, and lower management levels, and since the differences generally seem to increase as one comes down the managerial hierarchy, one might assume by extrapolation that these differences also exist in the labour force. The existence of these cultural differences would tend to be confirmed by the Auclair-Read analysis of French- and English-speaking commerce students. Though not yet in management, the students exhibited statistically significant differences in certain key values and attitudes.

From the Auclair-Read study, then, we can safely presume that there are important differences between the French- and English-speaking Canadian labour forces. We can also surmise that, in general, the cultural differences identified would go some way towards explaining the lower productivity and income of French-speaking Canadians. English-speaking Canadians appear to rank economic goals higher than their French-speaking colleagues do, and French Canadians appear to be burdened with a greater sense of conflict between their roles as members of the labour force<sup>4</sup> and their roles as fathers, citizens, and members of an ethnic group. Finally, the French Canadian is less "theory Y" and more "theory X" oriented than his English Canadian colleague.<sup>5</sup> It is generally agreed that a theory X "authoritarian" climate is less efficient and less productive than is the more modern theory Y "permissive" orientation towards human motivations and capabilities. In the future, behavioural and social scientists will undoubtedly cooperate in undertaking broader research projects which will embrace more of the explanatory variables within a single research design. Then we will know more about the relative importance of cultural, educational, economic, and other considerations in explaining the economic growth of countries and people.

For the moment it should be noted that the cultural differences established by the Auclair-Read study are statistically significant, but we do not, as yet, know the impact of these differences on productivity. The range of differences within each cultural group is very much wider than is the spread between the means of the two groups. In other words, any given individual is almost, but not quite, as likely to find himself in disagreement with a member of his own ethnic group as with a member of the other ethnic group.

Indeed, it would be surprising if it were otherwise. After all, Canada has survived for 100 years and the two major ethnic groups share a cultural heritage which, from the point of view of history, literature, politics, religion, and language, overlaps more than it diverges. Political ideology might be seen as a source of cultural divergence in some countries. However, French- and English-speaking students, citizens, and workers share about equally in the western heritage of Marx, Mill, and Voltaire, and have shared (or suffered) similar political institutions and politicians.

Religion is of course an important source of values and attitudes and much has been written about the possible connection between religion and economic progress. Since Max Weber's *The Protestant Ethic and the Spirit of Capitalism*, written just after the turn of the century, many historians and anthropologists have examined the relationships between religion on the one hand and growth, motivation and productivity on the other. There are some *a priori* and empirical grounds for believing that at least a weak connection between productivity and religion exists, or at least that it used to exist. In western countries, however, one must almost assume that the rules of growth and/or religion have been rewritten or reconciled. In any event we know that at the present time Catholic Italy is growing faster than Protestant England, and that the rate of economic growth in Buddhist Japan exceeds the sum of the growth rates in Italy and the United Kingdom put together. It would be surprising, therefore, if the religious differences that exist between Quebec and Ontario accounted for a significant part of the difference in productivity in these two regions.

There are many other cultural and social factors that have been cited at various times to explain the problems of underdeveloped countries. For example, we know that willingness to take risks (itself related to productivity) is positively related to income. We also know that extended family systems, that is, financial responsibility for all one's relatives, can have a negative effect on incentive. Why work harder for more income if the reward is to have more hungry in-laws move in? However, while such considerations may be important in making comparisons between the United States and India, it is unlikely that they occupy a central role in explaining regional differences within North America.

In the interviews for this study it was suggested that the minority position of the French Canadians makes them defensive, conservative

and inward-looking. The relationship of these attributes to motivation is not clear but in any event there is some evidence that the non-French, non-Anglo-Saxon Canadians, who are an even weaker minority, numerically, have achieved relatively high incomes and are well represented in management. There is also evidence that French Canadians outside Quebec have done relatively well.

The full evaluation of the relationship between these cultural factors and productivity must be left to others. Here we intend to show that education and productivity are very strongly linked. Indeed, proving that such a link exists is not the main problem. The main problem comes in establishing the direction of the causal relationship: does more education cause higher productivity or vice versa? No one could possibly deny that people with more education are more productive and have higher incomes than those with less, but by itself the correlation which describes such a relationship would neither establish the direction of the cause nor prove that there is a direct causal relationship at all, since both conditions might be a function of some third factor. Clearly, men who buy long belts tend to be fat but this does not prove that the purchase of long belts causes the stomach muscles to sag. Parents who have girl babies also tend to have boy babies but this does not prove that girl babies cause boy babies or vice versa.

The problem has of course been considered by those statisticians, educationalists and economists who have undertaken research on the relationship between education and productivity. All recognize that ideally what is needed is a multivariable analysis that fully considers family, ability, personality, and so on. So far we do not have the definitive empirical relationship, but there now exist quite a number of studies which do take into account one or more of the other non-educational factors.

One such study, by Dael Wolfle and Joseph G. Smith,<sup>6</sup> compared the earnings of college graduates and non-college graduates who, at the time of graduation from high school, appeared to have comparable academic records, intelligence (as measured by tests), and family backgrounds. While of course income varied positively with both family position and intelligence, the strongest relationship was between income and post-high school education. It was found that on average the student who went to university earned \$1,400 a year more than the one who did not. The difference was greater between highly intelligent pairs than between those pairs who were less gifted.

A similar study attempted to correct for environment, "connections" and heredity by examining pairs of brothers. Once again brothers with more education earned significantly more than those with less. After considering these and several other studies, Gary S. Becker in *Human Capital*<sup>7</sup> concluded:

Five independent adjustments for differential ability—adjustments that cover such diverse influences as rank in class, I.Q., father's education and occupation, personality, ability to



communicate, motivation, and family upbringing—all suggest that college education itself explains most of the unadjusted earnings differential between college and high school graduates. Although any one study is subject to many qualifications, the evidence provided by all taken together has to be given considerable weight. Consequently, it may be concluded that even after adjustment for differential ability, the private rate of return to a typical white, college male graduate would be considerable, say, certainly more than 10 per cent.

In placing the emphasis where we do on education, we can draw support from the work of a group of economists who have been attempting to explain increases in output per person. These economists, who include Solow,<sup>8</sup> Massell,<sup>9</sup> and Domar,<sup>10</sup> have been instrumental in shifting our emphasis from the more conventional lines of thought concerning growth and productivity.

In classical economics, the existence of technological change was recognized, but it was generally treated as an exogenous factor which, from time to time, shifted the production function. Basically, the output of a region grew by the application of more capital and more labour. The quality of the capital and the quality of the labour were often—for good analytical reasons—held constant.

Now we have been led to believe that this approach is basically wrong. The major explanation of the increase in output per worker in the United States cannot be attributed to the increase in capital. It must instead be attributed to the developments in a broad area of human activity embracing scale, and technological and administrative change. These changes turn out to be little more than the learning and teaching of ideas which are new to the individual, the group, and sometimes to all mankind. This learning and teaching is, of course, the very heart of education.

These studies then give strong support to the thesis that research (which is only a special case of learning and teaching) and education (of the more prosaic kind) deserve first place in explaining the relative growth in productivity of regions of approximately equal cultural backgrounds.

Another group of studies which are relevant to our inquiry have been made by such writers as Schultz,<sup>11</sup> Becker,<sup>12</sup> and Hansen.<sup>13</sup> These researchers have recognized the income-creating value of education, and since any expenditure that creates a stream of benefits in the future is by definition an investment, they have brought to bear on the subject the usual tools of analysis appropriate to investment decisions. In brief, they have undertaken studies designed to work out the productivity of education as a rate of return on the expenditure on education itself. As a result of these studies it has been found that expenditure on education earns a substantial revenue and from the point of view of either the individual or society is a very sound investment. Professor W. L. Hansen, for example, finds

that the rate of return on education works out to something like 12 per cent for society and 17 per cent for the individual.\*

All of these studies support our thesis that education, broadly conceived, is the most important variable in explaining differences in productivity among groups of individuals similar in cultural and racial background. For one reason or another, however, the studies so far cited have not reported their findings in such a way that they can be immediately applied to the problem at hand. An American study which is somewhat more useful for our purposes is that of H. P. Miller<sup>14</sup> which related census data on incomes and educational levels. From this study it can be shown that in the United States each additional year of education, in the range from eight to 16 years of schooling, is associated with an increase in income of approximately 12 per cent per annum. It may be noted that the correspondence of education and income is not uniform over the years. It makes some difference whether an additional year of schooling is added at the high school or university level and whether it involves the completion of a programme. (The statistics indicate that the increment of income associated with the final year of a high school or a university programme is considerably higher than the preceding or non-graduate years. That is to say, a high school drop-out does not receive the same benefit per year from the years he does devote to high school as does the high school graduate.) While the estimate derived from Miller's data is subject to many qualifications, it does give us at least the basis for an educated guess at what might happen to productivity in a similar country or region if the average level of education could be raised by one year.

Two important qualifications must be stressed concerning the foregoing analysis. The first concerns the quality of education. It is apparent, though perhaps difficult to prove statistically (and dangerous to prove politically), that the quality of education is not uniform across Canada. We shall have something to say on this matter later on. The second qualification brings us back to the subject of goals. In making the correlation we did between schooling and income, we came close to assuming that the purpose of education was to increase material well-being. We believe that this is, in fact, at least one of the principal goals of any educational system in Canada, though no self-respecting teacher would like to be called a servant of capitalism and affluence. Nor would he like to be blamed for the increasing misery of the proletariat. There are obviously other highly worthy educational goals which are not closely associated with earning an income and there are many other goals which, worthy or not, we have inherited from the past.

Some education is pure consumption. It is taken or given for the pleasure it affords the student or teacher (whose enjoyment may by no

---

\*The higher rate of return to the individual follows from the fact that neither he nor his family is called upon to pay the full cost of his schooling.

means be equal nor even of the same kind). Some part of education may be intended as a social, cultural or religious investment, and finally some part of any education in Canada, it appears, is an economic investment and is really intended to increase the student's economic competence. Since neither time nor education is a free good, either to the individual or to society, it follows that the more educational time and money are devoted to one set of goals, the less will be available for any other, and if, to overcome such a conflict, more resources are devoted to education fewer will be available for other purposes.

One is prompted to raise this issue because it is felt that in the past at least—if not in the present or in the future—there was a significant difference in goals between the educational systems of Ontario and Quebec.

Thoughts along these lines were prompted by a sentence from Willson Woodside's *The University Question*.<sup>15</sup> The last chapter, entitled "Quebec Is Different," begins: "Higher education in French-speaking Canada is very different from that in English-speaking Canada, but more because it is Roman Catholic education than because it is given in the French language. It has remained until very recent years gripped in the pattern of classical education developed in Catholic Europe just after the reformation. In the three centuries between the establishment of the first Jesuit college in Quebec in the early seventeenth century, until the end of the first World War, it changed hardly at all."

In order to present a more balanced view, perhaps it should also be pointed out that the pattern of classical education adopted in English monasteries and perpetuated at Oxford and Cambridge has had a long, lingering influence on McGill University and the University of Toronto, and through them, on the rest of Canada. The nationalizing and denationalizing of the monasteries and the passage of the B.N.A. Act accomplished surprisingly little by way of curriculum reform. One has but to compare the history of business education in English Canada with that in the United States to see how much English Canada has remained "gripped in the pattern of classical education." It must be added by way of further qualification that the first and for a very long time, the most businesslike, business school in Canada was l'École des hautes études commerciales of Montreal.

As a final qualification it would seem that if a new edition of Woodside's book were being prepared today, the chapter might more properly be headed "Quebec Was Different." In any event, however, the change which is obviously taking place in Quebec in current education will take many years before it alters significantly the stock of education, that is, the total accumulation of knowledge and training of the people.

The relative position of Quebec is further complicated by the fact that other regions in North America are not standing still in the matter of education either. It may indeed take a long time before



the stock of education, as judged by the needs of a modern, changing society, is comparable to that of, say, California, where at the present time approximately 40 per cent of the relevant age group is enrolled in university, and one in six of this university population is enrolled in a programme specifically designed to prepare the student for a position in business management.

One must agree with Willson Woodside, however, that institutions cannot be classified on the basis of whether they use French or English. In the area of business education, the non-clerical *École des hautes études commerciales* has its counterpart in the University of Western Ontario. The University of Laval programme, on the other hand, has more closely resembled the programme at St. Dunstan's or St. Francis Xavier, both English-speaking universities, and there is certainly a greater difference between St. Dunstan's and Western Ontario than there is between l'*École des hautes études commerciales* and Western Ontario.

A comparison of personal experiences by participants in this study, leads to the supposition that the same kind of differences and similarities would be found if we were to compare the primary and high school programmes in Quebec with Protestant (or non-sectarian) and Catholic programmes elsewhere. The differences that do exist seem to be based more on religious than ethnic grounds, or, more to the point, the differences are mainly a function of the extent to which education has remained in the grip of the classical ideology.

It is obviously difficult to prove or disprove Mr. Woodside's opinion by empirical research. Additional insight might be gained, however, from a curriculum survey (not yet published) which was conducted recently for the Association of Canadian Schools of Business by the author of this study. This survey seems to support Mr. Woodside's hypothesis. In one instance it was calculated that for a specific non-Quebec but Catholic commerce programme, almost 25 per cent of the lectures are devoted to what could be called religious instruction, or to courses closely attuned to church dogma. In a four-year programme this amounts to the equivalent of one full year of study.<sup>16</sup>

A second piece of empirical evidence can be found in a report dealing with the entrance examinations written for entry to post-graduate business programmes. The report to which reference is being made is unfortunately confidential and cannot be quoted directly; it has been examined carefully, however, and it clearly indicates that students coming from church-controlled universities,\* or universities which graduate students after only 15 years of schooling (programmes

---

\*"Church" rather than "Catholic" schools because the above generalization seems to apply to all church institutions. It so happens that most of the universities controlled by religious bodies are in fact Catholic.

that require either 11 years of primary education and four of university, or 12 primary and three university) have below-average scores. From the below-average performance of graduates, one might easily conclude that religious education absorbs about one year of a student's time; or, to put the matter differently, with the kind of programme typical of a church-controlled university, a student may require a year longer than a student of a non-church university, to make an equivalent investment in knowledge that increases productivity. What this means is that a commerce major from a church-controlled university may have to complete all or part of a Master's degree to be in the same economic position as a Baccalaureate holder from a non-church school.

The evidence suggests that this-world and next-world instruction is competitive rather than complementary at least as far as material progress in this world is concerned. Champions of classical education may object to this conclusion, yet it is difficult to provide any other hypothesis that will fit the facts. Indeed, this conclusion seems to be reinforced by experience with classical and religious instruction and instructors.

There are many strands of thought in religious and classical education which tend to minimize the importance of and sometimes even to deplore material progress. Much, though by no means all, of this instruction is based on dogma, faith, memory, and authority rather than on problem-solving and research. Physical, natural and social sciences, on the other hand, are more likely to condition the student to accept and welcome change. Educational programmes which stress antiquity, faith, "eternal values" and the acceptance of authority may be what a particular society or an ethnic group wants, but it will not lead naturally and inevitably to the kind of knowledge or to the mental attitude which produces high economic motivation, innovators, or entrepreneurs.

Of course, even if we had proven that instruction with a classical or religious orientation reduced one's material advancement in this world, this would most certainly not prove that such instruction was undesirable. It does, however, suggest that a choice may have to be made. Latin scholars, historians, and philosophers should not expect to be as rich as engineers, pharmacists, and M.B.A.'s. (This does not mean, of course, that the former will need to feel, or that they will feel, at all inferior to the latter.) We would hardly expect an individual who had taken the vow of poverty to be as rich as an individual who had not. It is a short step from this logic to the proposition that if an ethnic group collectively decided to condition its children to place a high value on non-material things and a low value on goods and services we would not expect that group to be as rich as another group with a different orientation.

The problem is, one suspects, that the people who are conditioned to prefer a classical education are not told that they are, in effect, taking the vow of relative poverty. However, once a connection

between a classical education and a low income is established or suspected, consumers may react if alternative choices are available. How else would one explain the decline of the classical arts degree? Or how else can one explain the rapidity with which the classical colleges are being phased out in Quebec? To be wise after the fact one even suspects that the "leaders" who for so long feared to change the educational system were followers rather than leaders of public opinion.

In this chapter, we have been concerned with productivity and income in Quebec, especially as they compare with the bench-mark of Ontario. While we have not so far been concerned explicitly with either corporate practices and policies or ethnicity, these two factors are, of course, basic to our analysis. Wages and salaries are determined in an industrial and commercial marketplace dominated by corporate firms. It is important, therefore, to know whether there is any reason to suspect that firms operating in Quebec obey a different set of rules than they do elsewhere, especially in determining wage and salary policy.

As viewed on a "macro" or province-wide basis, it would not seem that widespread ethnic discrimination with regard to wage and salary administration would work. That is to say, it seems on *a priori* grounds that any conscious or unconscious tendency to pay any class of workers less than they produce (relative to other, competing classes of workers) would simply increase the profitability of expanding the employment of such workers or of establishing plants in locations where such workers could be hired. As we have seen, this has not happened and we must conclude that ethnicity could not be a major factor in determining corporate practices and policies concerning wages. More precisely, if a wage policy existed which involved significant ethnic discrimination (as defined above) it would be "corrected" by investment and plant location policies which would drive up the price of those labourers whose wages were below their productivity.

On the contrary, we shall see that there is good evidence to indicate that the observed differences in income in Ontario and Quebec can best be explained by differences in productivity, which, in turn, reflects more than any other single factor the quantity and quality, or, at least, the quantity and kind, of training and education in the two provinces.



### *A. Introduction*

The previous chapter was concerned with productivity of the total work force in Ontario and Quebec. The analysis suggested, though it did not prove, that the difference in the educational levels of the work forces in the two provinces was probably the main reason for the persistently higher level of income in Ontario.

Because of lack of better data, all of the investigators whose studies were referred to in the previous chapter had to match income against years of education. The investigators knew full well that some years of education would increase productivity significantly while others might have a negative effect. There is no doubt that, for the purpose of establishing a link between average education and average income, the analyses cited were statistically adequate. For our purpose, however, where it is suspected that two "competing" educational systems may themselves provide part of the explanation for observed income differences, a more refined analysis is demanded.

In trying to come to grips with this problem, it was argued that it might be possible to make more precise measurements and therefore draw more valid conclusions if, instead of working with the total labour force, we could single out groups which are educationally more similar. The groups, it seemed, which were apt to be most alike would be those in professions taught at the university level. In some cases, minimum standards are imposed by professional bodies, and in all cases there is a good deal of feedback to the university departments from conferences, professional journals, and students who go on to postgraduate work.

If our hypothesis that the amount, kind, and quality of education is the major explanation of why English-speaking Canadians earn more than French-speaking Canadians, it would seem likely that if we could compare the income of a French-speaking group with the income of an English-speaking group which had had the same education, we would

find most of the income gap closed. The remaining gap, if any, could then be attributed to other explanatory factors, such as unilingualism, the cultural differences referred to in the previous chapter, prejudice, lower mobility, and so on. It was not possible to find data on such groups, or even to imagine that such groups existed in a statistically identifiable form. However, it was thought that, as between different ethnic groups, the professionals, such as engineers, would be most similar from the educational point of view and least "gripped in the pattern of classical education." True, the typical French-speaking engineer and English-speaking engineer would have come through quite different educational systems in public and high school, but, at least from university entrance on, their educational experience should be quite similar. In this chapter, therefore, we attempt to deal with the relationship between income and the two linguistic groups in the professions of engineering, architecture, and science.

The reason for choosing these particular vocations is simply that data were available. The empirical base for this chapter is a survey conducted by the federal Department of Labour in the years 1962, 1963, and 1964, which was sent out each year to about one-third of the engineers, architects and scientists in the province of Quebec. The survey also covered other provinces and other years. For the most part our analysis is confined to the 1962-4 survey results for Quebec but where the statistics were applicable the Ontario survey was also examined to see the relative positions of the graduates of French-language and other universities who were working in that province.

This questionnaire covered functions performed, including management (and thereby provided much of the basic data for the next chapter), educational level, university in which the undergraduate degree was obtained, and salary. The survey was not designed specifically with either ethnicity or corporate practices and policies in mind; if it had been, it could have been even more relevant to the problem at hand. Yet the information is useful, and we are indeed very fortunate to have it. Most of the respondents were employed in industry or by industry—in the case of consultants—and their income achievement in aggregate must be a reflection of corporate practices and policies.

The main shortcoming of the survey from our particular point of view is that it did not ask the respondent to indicate either language or ethnic origin. However, it did ask for the university in which the respondent studied for his first degree. Thus it seemed reasonable to assume that if we considered the graduates of the four French-language universities, the University of Montreal, Laval, Sherbrooke and l'École des beaux arts, we would have a group which would be very close to being 100 per cent French-speaking. Graduates of all other universities in Canada and elsewhere in the world were lumped together in a category modestly designated as "other." It is realized of course that there are many French-speaking Canadians in bilingual universities such as Ottawa, and in English-speaking

universities such as McGill. It appeared, however, that the proportion of Canadians of French language and culture in these other universities would be small enough that their effect on the total analysis could not be too great.

In addition to its failure to identify ethnicity or language there are other ways in which the questionnaire falls short of providing us with two really comparable groups. It would be desirable to select groups with about the same business-related values and about the same motivation to succeed in business. It would be desirable to compare two otherwise similar groups of unilingual English-speaking and unilingual French-speaking Canadians. It would also be most interesting to compare otherwise similar French and English bilingual groups with each other and with unilingual groups.

It seems fairly certain that, in being forced to take the graduates of the French-language universities as the representatives of French-speaking Canadians, the comparison has been biased by excluding all the fluently bilingual professionals who graduated from bilingual or English-language universities. It is highly probable that our French-language group includes a larger percentage of unilingual professionals than would exist in the total population.

The seriousness of this bias depends of course on the disadvantage of unilingualism. Certainly it must be postulated that, other things being equal, knowledge of a second language is economically useful. Indeed, other things being equal, a knowledge of computer language or behavioural science or marketing or any other relevant skill or knowledge is useful. Common sense tells us that knowledge of English is particularly useful in North America and if this needs to be stressed it may be noted that Professor R. N. Morrison in his study, *Corporate Adaptability to Bilingualism and Biculturalism*,<sup>1</sup> found that in French Canadian owned and operated firms a knowledge of English is demanded for a higher percentage of executives than is the case for American or English Canadian owned firms.

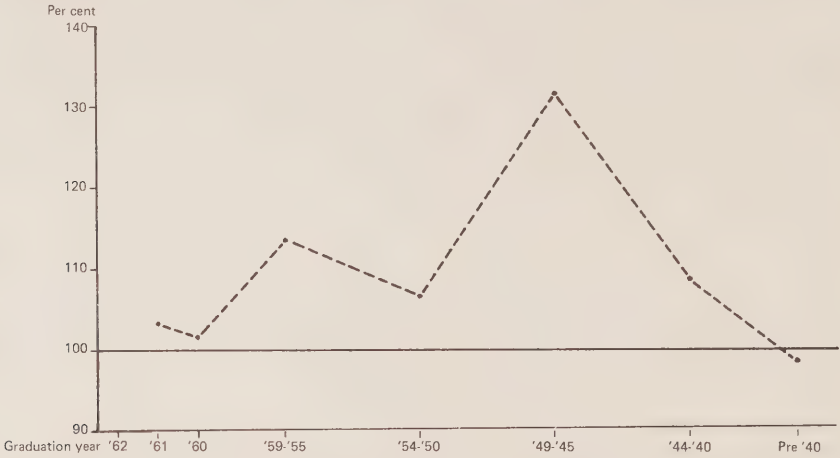
Even though the comparisons made possible by the Department of Labour survey are far from ideal, they were still the best available at the time this research was undertaken.

### B. Architects

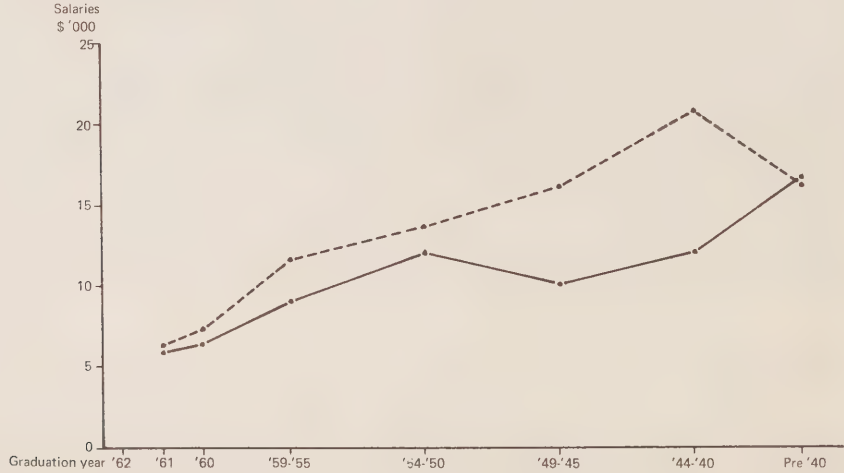
The first professional group in our analysis is that of architects. The sample is made up of 208 individuals of whom 101 are graduates of the two French-language universities that grant degrees in architecture—the University of Montreal and Laval—and 107 are graduates from all other universities. Figure III.1 shows the salaries or earnings of architects by years of graduation for the French-language group and all others, and the average salary of French-speaking graduates expressed as a percentage of the average salary of all graduates.

Figure III.1  
Professional achievement of university graduates in Quebec, Bachelor level: Architecture

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities ----, and other universities \_\_\_\_\_



Number:							
French	—	6	5	28	17	7	29
Other	—	4	1	29	30	13	28
Salary (\$):							
French	—	6,500	7,300	11,732	13,441	16,000	20,777
Other	—	6,000	6,500	8,948	12,100	10,115	12,000
Salary as % of average:							
French	—	103.2	101.9	113.7	106.8	131.4	108.3
Other	—	95.2	90.7	86.8	96.2	83.1	62.6



In this as in all subsequent figures in this chapter, dealing with professional achievement, the data refer to professionals who are neither teachers nor managers.

In interpreting this and other similar charts which will present the data for scientists and engineers, one must consider the number of graduates indicated for each class or each span of years. The data presented constitute a sample of about 20 per cent of the engineers, architects and scientists in Quebec, but care must be taken not to put too much weight on the statistics for any particular graduation class if the number in it is small.

We can see that the French Canadian architects in this sample compare very favourably with all others practising in the province of Quebec. Indeed, save for those who graduated before 1940, who lagged by only 2.6 per cent, the French Canadians have incomes averaging a little better than \$2,000 *more* than graduates of other universities. For this profession at least one must conclude that the education and productivity of the average French-speaking architect are superior to that of the graduate of other universities, or that there is some discrimination at work which operates in favour of French Canadians. Certainly it would be very hard to maintain that in this profession the French-speaking Canadian is at any disadvantage. This suggests that if there is any tendency for some large national or foreign firms to seek out non-French-speaking architects as employees or consultants, this tendency is more than offset by firms with just the opposite bias.

In our sample there were only eight architects with higher degrees (all Master's) of whom only one was a French Canadian. No conclusion therefore is warranted concerning the performance of those beyond the Bachelor level.

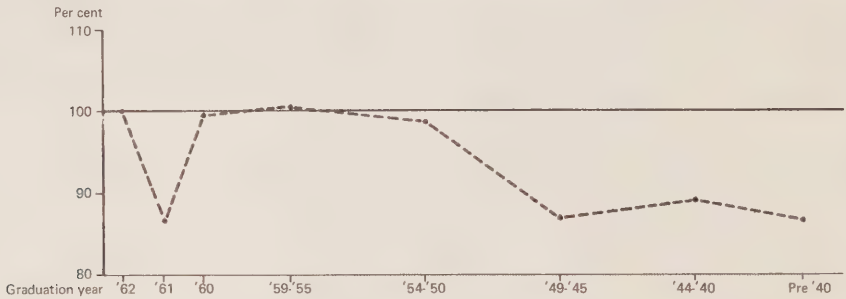
A somewhat different explanation is suggested by a study of John Porter and P. C. Pineo in which it is reported that in the evaluation of occupations the "widest discrepancy in rank among the professional occupations was 'architect,' which the French ranked almost ten points higher than did the English."<sup>2</sup>

One could reason that in time the greater prestige of the architect among French-speaking Canadians would attract somewhat better young people into the profession and that their greater ability would be reflected in greater productivity and income. On the other hand, one would wonder why architecture should have acquired such prestige and one might expect that high income might be at least part of the explanation. In other words, high prestige and high incomes may have a joint and reinforcing effect on recruitment. Still it is hard to imagine that prestige and selection can be the only explanation for the higher incomes of French-speaking architects.

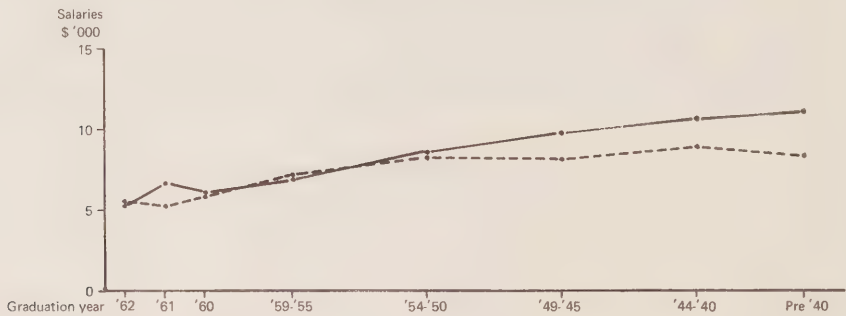
English-speaking architects with whom these research findings were discussed, were quick to state that the two French-language schools of architecture in Quebec are, in fact, excellent. The director at

Figure III.2  
Professional achievement of university graduates in Quebec, Bachelor level: All science

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities ----, and other universities \_\_\_\_\_



Number:		11	18	25	154	114	84	63	130
French									
Other		1	30	49	219	230	153	70	104
Salary (\$):									
French		5,590	5,277	5,940	7,103	8,254	7,928	8,674	8,319
Other		5,500	6,600	5,989	7,061	8,447	9,767	10,664	11,221
Salary as % of average:									
French		100.1	86.5	99.5	100.3	98.5	87.0	89.2	86.6
Other		98.5	108.1	100.3	99.8	100.8	107.1	109.7	116.8



one English-language university stated that the two French-language schools were, in his opinion, much above average, and he was not surprised to learn that the incomes of their graduates were also above average. In other words, here is one area where the quality of "a year of education" is admittedly high for French-speaking Canadians, perhaps higher than it is for all "others."

It is only candid to report also that some of the interviewers expressed the opinion that provincial and municipal bodies have considerable direct and indirect influence on the choice of architects for projects owned or controlled by the government. This influence, it is reported, is used to protect the interests of French-speaking Canadians.

### *C. Science Graduates*

The survey of scientists in Quebec, which provides the basis for this analysis, gives us information on 1,455 people considered to be at the Bachelor level of education. Of these, 599 came from the French-language universities and 856 from all others. Figure III.2 shows the incomes of all the science graduates in our sample.

At first glance, it appears that the experience of the French-speaking scientist contrasts sharply with that of the architect. Whereas the architects from the French-language universities generally have a significant advantage over all others, the science graduates of the same institutions have a decided income disadvantage. Those who left their universities before 1950 are at a salary disadvantage ranging from 11 to almost 15 per cent. The more recent graduates on the other hand have done very much better. Indeed, apart from the anomaly of 1961 (when both the French and other graduates seemed to be out of line not only with each other, but also with their fellow graduates in the classes on either side), the French-language and other science graduates seemed to be on about a par.

The very different experience of the architects and the scientists permits two quite different interpretations. On the one hand it may be argued that the French-language architectural schools have been, and continue to be, of considerably better quality than the average of all others and that by the same token the science facilities in the same universities are, or rather were, of about 10 per cent lower quality. According to this interpretation of the data, the difference in the experience of the graduates of these two professions might be attributed to the quality of the professional courses themselves.

A second hypothesis is that the French-speaking scientist is more likely to work directly for an English-language firm and therefore, especially as he gets older, he becomes more vulnerable to discrimination. Furthermore, if he has a language disability, it will likely become a more serious disadvantage in a large English company as he

grows older. While the French Canadian architect must also do a considerable amount of work for English-language firms, the provincial and local governments are more often the employer, and through their control of building permits, zoning laws and the like, they are able to protect (and perhaps overprotect) the interests of the French-Canadian professional.

It need hardly be added that these two theories, each of which might be supported by the two charts so far presented, have rather different policy implications, and it is important therefore to search for further evidence.

This search led to an inquiry behind the aggregate figures for scientists. Unlike architecture, which is a recognized, long-established profession with something approaching uniformity of qualifications imposed by the professional associations, building codes, and so on, science covers a multitude of areas in which, at the terminal Bachelor level at least, there is not the same machinery for insuring even an approximate uniformity of quality or content. It is quite possible therefore that the science graduates of the French-language universities do not have the same mix of skills and training as their colleagues coming from other institutions.

How different the two groups of science graduates in our study are can be seen from the analysis in the following table which shows the number and average salary of French and other pre-1940 graduates in each of the science categories for which we have information.

Table III.1

Number and average salary of French and other science majors graduating prior to 1940

Branch of science	French		Other	
	Number	Average salary	Number	Average salary
1. Biology			2	\$10,500
2. Mathematics			2	9,500
3. Geology			4	10,000
4. General science			16	11,300
5. Other science	1	\$40,000	3	9,200
6. Chemistry	13	13,300	42	11,300
7. Other courses	116	7,500	35	11,500
Total science	130		104	

It is readily apparent that the full explanation of why the pre-1940 graduates of French-language universities have not prospered must lie in the nature of the "other courses" and the suitability of these courses to today's needs. The 13 chemists and the one "other"

scientist in this age group have done very well; in fact their incomes happen to be above average.

Although the time and resources were lacking to go into this problem of educational quality in any depth, it was concluded that so far as the French-language universities are concerned, the "other courses," especially in the early years, were likely to have included the *cours scientifique* which until fairly recently was parallel to the *cours classique* and was not generally considered either in France or in other North American universities to be the equivalent of a full undergraduate university degree. The number of French Canadians in the group above does not permit us to be too dogmatic, but the evidence of Table III.1 suggests that it is the nature of the course rather than language group that determines professional achievement.

In searching for further evidence it was found that unfortunately the only science course reasonably similar in French-language and other universities with a sufficient sample to make a comparison meaningful, over time, is chemistry. Figure III.3 shows absolute and relative income performance of the French-speaking and other graduates. While the graduate in chemistry from a French-language university is at a disadvantage, the income handicap is slight--on average, 2 per cent.

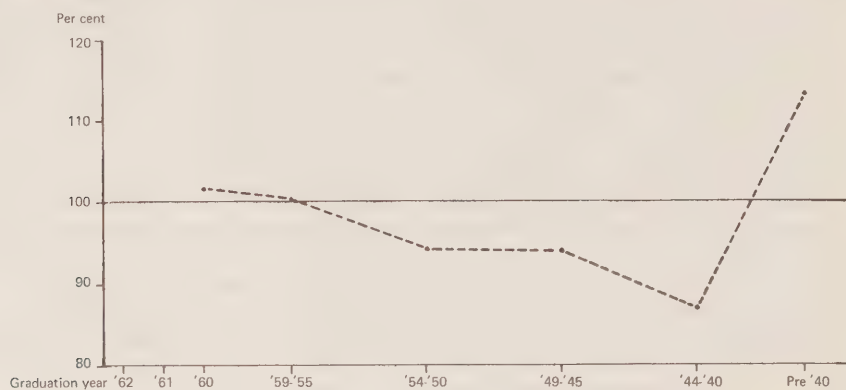
Although "general science" would hardly constitute a homogeneous discipline, it is, apart from chemistry, the only other scientific designation in which we have a reasonable number of cases. Even so there are only 22 graduates from French-language universities in this category. The experience of the general science graduates from French-language and other universities is shown in Figure III.4. The pattern of relative incomes, it will be observed, is rather similar to that for chemistry graduates. The weighted income disadvantage, for what it is worth, is just over 4 per cent. But again it is more than likely that comparing general science in the French-language and other universities 10 or more years ago is rather like comparing apples and oranges.

Table III.1, which shows the distribution by discipline of the pre-1940 science graduates of the French-language and other universities, made it apparent that comparable information is scanty for graduates from degree courses in science. In the sample, in addition to the 110 French Canadian graduates in chemistry and general science (shown in Figures III.3 and III.4) there were only 31 degree holders in mathematics and physics, biology, mathematics, geology and other science in graduation-year classes in which there were also graduates from other universities. It was possible to compare the overall income performance of only these 141 individuals with that of graduates of other universities in the same graduating class and science discipline. Individually of course comparisons between categories of discipline and graduating class are not statistically significant. For example, to be told that the two mathematics and physics graduates from a French-language university who graduated between 1955 and 1959

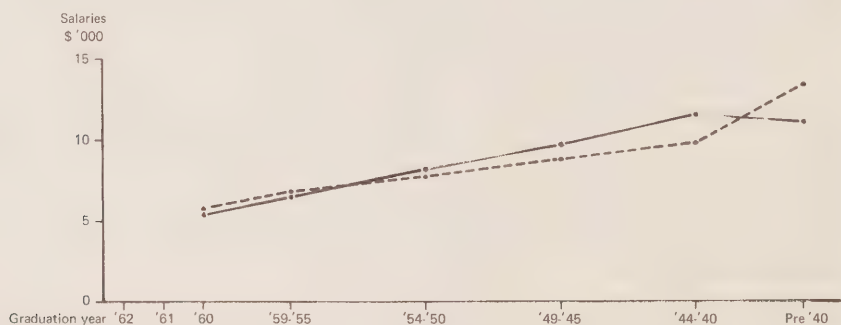
Figure III.3

Professional achievement of university graduates in Quebec, Bachelor level: Chemistry

Salary of graduates of French-language universities as a percentage of average



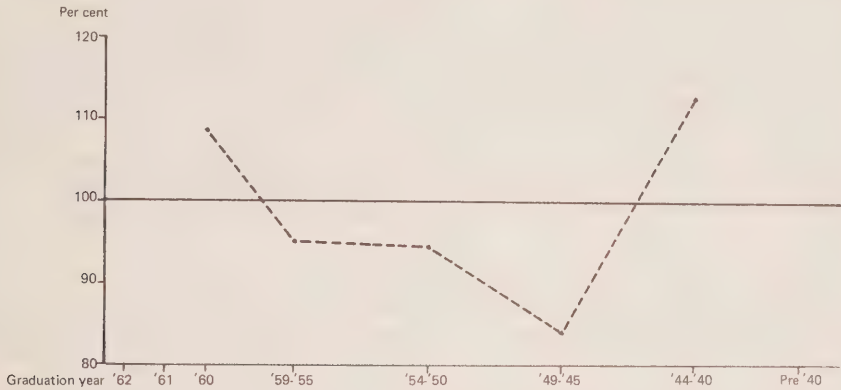
Average salaries of graduates of French-language universities ----, and other universities \_\_\_\_\_



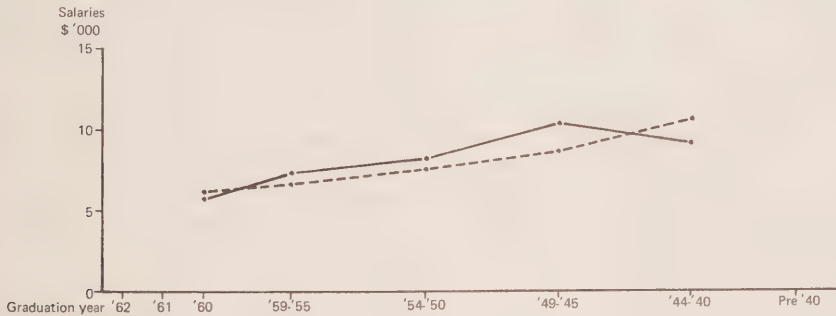
Number:								
French	1	—	6	24	15	19	10	13
Other	—	1	3	32	55	35	28	42
Salary (\$):								
French	5,500	—	5,833	6,958	7,833	8,815	9,800	13,346
Other	—	6,500	5,500	6,906	8,472	9,714	11,821	11,309
Salary as % of average:								
French	—	—	101.9	100.4	94.0	93.8	86.8	113.2
Other	—	—	96.1	99.7	101.6	103.4	104.7	95.9

Figure III.4  
Professional achievement of university graduates in Quebec, Bachelor level: General science

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities ----, and other universities —



Number:							
French	—	—	1	6	8	4	3
Other	—	28	37	112	83	47	9
Salary (\$):							
French	—	—	6,500	6,666	7,625	8,750	10,833
Other	—	6,571	5,986	7,035	8,150	10,553	9,166
Salary as % of average:							
French	—	—	108.3	95.0	94.1	84.1	113.0
Other	—	—	99.8	100.3	100.6	101.4	95.7



had the same average income as the four mathematics and physics majors who graduated from other universities in the same period does not prove very much. Collectively, however, the total experience of the French Canadian graduates is worth noting. It was found that the 141 French-speaking graduates for whom such comparisons were possible in the above categories (which include chemistry and general science shown in Figures III.3 and III.4) had incomes 1.67 per cent below those of graduates of other universities. In other words, a crude attempt to compare like with like reduces the apparent disadvantage of the French Canadian graduate from 5.5 per cent (which is the weighted average disadvantage apparent in Figure III.2) to 1.67 per cent. This would seem to indicate that the income disadvantage of the French Canadian scientist with a Bachelor's degree is not great in industry and that the apparent disadvantage shown in Figure III.2 is more a function of the nature and mix of university programmes than of ethnic origin.

It also confirms that the incidence of almost all of the income disadvantage of French Canadian science graduates is focused on those who are classified under "other courses." The 301 pre-1951 graduates who elected "other courses" are at an income disadvantage of well over 10 per cent vis-à-vis science graduates in the same age group who elected to take other programmes. For example, their experience is very different from that of their colleagues from the same French-language universities who elected chemistry or even general science.

The next test performed was an examination of the Ontario survey of the Department of Labour to determine the income experience of the graduates of the French-language universities who were working in that province. As it happens there were only 18 individuals doing professional, non-management, non-educational work in Ontario during the period of the survey. Their graduating class, professional category and average salary are shown in Table III.2, along with similar data for the other science graduates with whom direct comparisons could be made. Also shown is the average salary of French Canadian graduates as a percentage of the average salary of all those in our sample in that particular category of science and graduating class. The number of individuals in this table is much too small to allow us to be at all dogmatic, but it is interesting and perhaps somewhat surprising that the average French Canadian graduate working in Ontario has just a tiny (and far from statistically significant) income advantage.

One might reason that if discrimination or prejudice were an important factor in corporation practices and policies, it would be most likely to occur outside Quebec where firms would have little to fear from either overt action on the part of the Quebec government or from social or customer pressure.

It is also of some interest to note the fact that not one individual with an "other course" academic background appeared in the Ontario sample; yet such individuals made up the vast majority (446



Table III.2

Graduates of French-language universities working in Ontario compared with graduates of other universities in the same discipline and graduation year

Discipline	Graduation year	French		Other		French as per cent of average
		No.	Average salary	No.	Average salary	
Chemistry	55 - 59	3	\$ 7,500	47	\$ 7,202	103.9
	50 - 54	3	8,500	117	8,286	102.5
	40 - 44	1	7,500	42	10,285	73.4
	Pre-40	2	11,500	93	10,139	113.1
General science	55 - 59	1	6,500	63	6,547	99.3
	50 - 54	2	6,500	50	7,930	82.5
Geology	55 - 59	1	6,500	27	7,018	92.9
	50 - 54	1	10,500	23	7,760	133.3
Math & physics	50 - 54	4	8,750	16	8,937	98.3
Total		18		478		

out of 599) of the French-speaking scientists in the Quebec survey. As can be seen, all 18 individuals had what might be called more science-oriented science programmes. If the "other course" scientists, many of whom are probably from the classical colleges, had been as mobile as their fellow science students from the same universities, we should expect to find over 50 of them in the Ontario sample. This bit of evidence lends some support to the proposition that with more and better education comes greater mobility.

In order to explore further the relationship between education and achievement, the incomes of those graduates of French-language and other universities who had acquired Master's or Doctoral degrees, were examined. In the combined 1962-4 survey for Quebec, there were 70 French Canadians who held Master's or *licence* degrees and 59 who held Ph.D.'s, all of whom, as before, were performing non-managerial, non-educational functions.

The results of this analysis are presented in Tables III.3 and III.4. The discipline and graduation-class columns in both tables refer to the Bachelor programme. It has been assumed that the Master's and Ph.D. degrees were taken in the same field, but of course there may be exceptions. The numbers shown under "French" and "others" refer to the number of undergraduates in each discipline and in each graduation class who went on to a Master's degree in the case of Table III.3 and to the Ph.D. degree in Table III.4. The right-hand column shows the incomes of those holders of Master's or Doctoral degrees who took their undergraduate training at a French-language university as a percentage of comparable professionals who took their undergraduate training at some other university.

Table III.3

Graduates with Master's or *licence* degrees working in Quebec who obtained undergraduate degrees at French-language universities compared with Master's graduates from other universities in the same discipline and graduation year (of first degree)

Discipline	Graduation year	French		Other		French as per cent of average
		No.	Average salary	No.	Average salary	
Chemistry	55 - 59	5	\$6,300	1	\$ 7,500	96.9
	50 - 54	1	7,500	2	6,000	115.4
	45 - 49	2	9,500	3	10,833	92.2
	40 - 44	3	6,833	12	12,250	61.2
	pre-40	4	8,000	17	12,117	70.6
General science	55 - 59	1	6,500	1	9,500	81.3
	40 - 44	1	8,500	1	14,500	73.9
	pre-40	2	9,000	4	10,000	93.1
Geology	55 - 59	1	7,500	3	6,500	111.1
	50 - 54	1	9,500	2	9,000	103.6
Mathematics	nil					
Other science	55 - 59	4	6,250	1	9,500	90.6
	45 - 49	1	5,500	1	14,500	55.0
Math & physics	55 - 59	2	6,500	3	7,500	91.6
	50 - 54	2	8,500	1	9,500	96.2
	40 - 44	1	7,500	1	10,500	83.3
Other courses	55 - 59	5	6,300	5	6,700	96.9
	50 - 54	9	6,611	11	9,045	83.2
	45 - 49	6	7,833	5	8,500	96.3
	40 - 44	8	7,650	5	9,100	93.7
	pre-40	11	7,772	15	12,366	74.6
Total		70		94		

Even a casual comparison of the relative income achievement of the French Canadian and other professionals at this educational level presents quite a remarkable anomaly. At the Master's level the weighted average income disadvantage of the graduate of the French-language university is 13.4 per cent. For the Ph.D. graduate the corresponding disadvantage of the French Canadian is only 1.1 per cent, and if those doctoral graduates with "other courses" in their undergraduate backgrounds are eliminated from the sample, the French-speaking Ph.D. is at a slight income advantage.

Table III.4

Graduates with Ph.D. degrees working in Quebec who obtained undergraduate degrees at French-language universities compared with doctoral graduates from other universities in the same discipline and graduation year (of first degree)

Discipline	Graduation year	French		Other		French as per cent of average
		No.	Average salary	No.	Average salary	
Biology	45 - 49	1	\$10,500	2	\$10,000	103.3
	40 - 44	1	8,500	1	14,500	73.9
	Pre-40	1	11,500	1	3,500	153.3
Chemistry	55 - 59	6	8,500	4	9,000	97.7
	50 - 54	8	9,375	19	9,710	97.5
	45 - 49	5	11,900	10	11,700	101.1
	Pre-40	6	13,166	26	13,865	95.9
General science	45 - 49	1	12,500	2	11,500	105.6
	Pre-40	1	11,500	5	10,900	104.6
Geology	50 - 54	2	9,500	3	9,800	97.9
Mathematics	Nil					
Math & physics	55 - 59	1	9,500	1	6,500	118.8
	50 - 54	3	11,166	1	11,500	99.3
Other courses	55 - 59	4	7,750	7	8,357	95.3
	50 - 54	8	9,000	9	9,111	99.4
	45 - 49	2	8,000	3	10,833	82.5
	40 - 44	4	7,500	1	10,500	92.6
	Pre-40	5	11,100	2	9,500	104.3
Total		59		97		

The explanation for this rather remarkable phenomenon is to be found, it would seem, in the confusion over the standard and indeed even in the translation of the term *licence*. If the *cours classique* or the *cours scientifique* is considered as a "Bachelor's" degree, then the *licence*, which generally involves only one year more of study, might be translated into a "Master's" degree. Certainly many holders of a *licence* report their academic level to be equivalent to that of a Master's degree, and undoubtedly many of the graduates in our sample reported their educational level in this way.

Any suggestion that the French Canadian holders of Master's or *licence* degrees are held back by ethnicity is difficult to reconcile with the relative income achievement of the French Canadian holders of Bachelor's degrees (apart from those with an "other course") on

the one hand, and with those who have gone on to a Ph.D. on the other.

As a further check on the possible role of prejudice on corporate practices and policies, the Ontario survey was examined to determine the relative achievement of graduates of the French-language universities who held Master's or Ph.D. degrees and who were working in the English-language environment of Ontario. There are only nine such individuals holding a Master's or (*licence*) degree and 15 holding Ph.D.'s. Their distribution by undergraduate discipline and year of graduation (at the first-degree level) is given in Tables III.5 and III.6. The overall income disadvantage of the French Canadian in the sample with a Master's degree is 3.5 per cent, and the disadvantage of the holder of a Ph.D. is 1.3 per cent (compared with an overall disadvantage of Master's and Ph.D. degrees in Quebec of 13.4 and 1.1 respectively).

With regard to the rather different income experience of Master's degree holders in Ontario and Quebec, the most probable explanation seems to lie again in the *licence*. We noted earlier that French Canadians with a *cours scientifique* appear to be much less mobile than those with regular Bachelor's degrees in science. The same may also be true of those with a *licence*. It is probably true that the nine French Canadian professionals in Ontario have for the most part regular Master's degrees. This suspicion is strengthened by the fact that if we take out from our sample of Master's graduates the one individual with an undergraduate "other course" who is the individual most likely to hold a *licence* on top of a *cours scientifique*, the remaining eight French Canadians are about on a par with all others as far as income is concerned.

It is consistent with previous observations that the two individual scientists with Ph.D.'s who started out their university careers with an "other course" are now at the greatest income disadvantage. To put the matter a little differently, if we take out these two individuals from our Ontario sample, the 1.3 per cent income disadvantage of the French Canadian Ph.D. working in Ontario becomes an overall advantage of 2 per cent.

If we can infer anything about corporate practices and policies from the income achievement of French Canadian and other scientists at the Bachelor, Master and Ph.D. levels, it appears that, for professional work at least, companies do not distinguish between employees on the basis of language and culture and that a person with about the same training gets about the same income. It must be pointed out to those who may hold that this analysis clashes with "conventional wisdom" or "common observation" on these matters that our data have gone at least to some extent beyond the crude category of scientist in attempting to make comparisons of professionals with about the same educational background, the same specialization, and of the same age group—a subtlety which could hardly be introduced into the everyday observations of friends, relatives and acquaintances. It is

Table III.5

Graduates with Master's or *licence* degrees working in Ontario who obtained undergraduate degrees at French-language universities compared with Master's graduates from other universities in the same discipline and graduation year (of first degree)

Discipline	Graduation year	French		Other		French as per cent of average
		No.	Average salary	No.	Average salary	
Biology	50 - 54	1	\$5,500	8	\$ 7,250	78.0
Chemistry	55 - 59	1	9,500	4	7,750	117.3
General science	50 - 54	1	9,500	1	7,500	116.3
Math & physics	55 - 59	2	7,000	6	6,666	103.7
	50 - 54	2	8,500	11	8,863	96.5
	45 - 49	1	7,500	4	9,500	82.4
Other courses	Pre-40	1	7,500	38	10,236	73.8
Total		9		72		

Table III.6

Graduates with Ph.D. degrees working in Ontario who obtained undergraduate degrees at French-language universities compared with doctoral graduates from other universities in the same discipline and graduation year (of first degree)

Discipline	Graduation year	French		Other		French as per cent of average
		No.	Average salary	No.	Average salary	
Biology	40 - 44	1	\$ 9,500	10	\$10,500	91.3
Chemistry	50 - 54	3	9,833	40	9,300	105.3
	45 - 49	3	10,500	44	10,295	101.9
	Pre-40	2	11,500	56	12,589	91.6
General science	50 - 54	1	10,500	10	9,000	114.9
Geology	50 - 54	1	8,500	10	9,500	90.3
	45 - 49	1	14,500	24	10,541	135.5
Math & physics	50 - 54	1	8,500	14	9,714	88.2
Other courses	50 - 54	1	7,500	54	8,796	85.5
	45 - 49	1	7,500	48	10,697	70.5
Total		15		310		



certainly apparent from our data that, especially for the older age groups, the "mix" of science training of French and other Canadians is very different, and moreover that the kind of training that other Canadians have received appears to give them an advantage in the marketplace.

The corollary to this is that to the extent that the French Canadian scientist is at an income disadvantage, most of his lost income must be attributed to the university programme which he chose or which, because of lack of alternatives, he was forced to take, rather than to his ethnicity or to the language handicap which he may have.

One other interesting observation which may be made concerning our analysis of French Canadian scientists in Ontario and Quebec concerns the effect of education on mobility. Of the professional scientists in the sample who graduated with a Bachelor's degree from French-language universities, fewer than 3 per cent are to be found in Ontario, and, as we have already observed, the mobility of those with an "other course" is approximately zero. At the Master's or *licence* level, the French Canadians appear to be over three times as mobile. Just over 10 per cent of the French Canadian professionals at the Master's level (non-management and non-educational) in our combined Ontario and Quebec sample work in Ontario. And again the relative income achievement of those in Ontario compared with those in Quebec suggests that the mobility of the holders of the regular Master's degree is higher than the mobility of those who hold only a *licence*. Finally, of the professionals in our sample who hold Ph.D.'s, we find that over 20 per cent of the people in Ontario and Quebec who started out in French-language universities in Quebec are working in Ontario. It can hardly be doubted that higher education makes individuals more mobile, and this fact has important implications for the long-term development of North America and the world.

#### *D. Engineers*

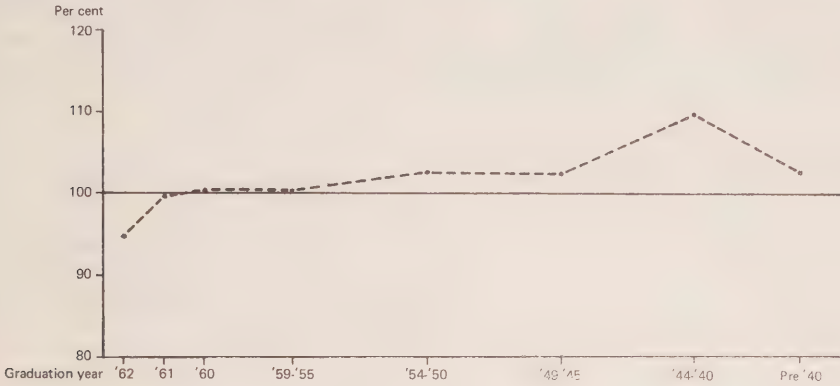
The following analysis of the incomes of engineers is based on data collected on nearly 8,000 graduates in Quebec of whom well over 2,000 are graduates of the four French-language universities. For certain purposes reference will be made to a survey of a somewhat larger number of engineers living and working in Ontario.

Figure III.5 relates to 4,170 graduates at the Bachelor's level who are in neither management nor education. It shows the average earnings reported for the years 1961, 1962 and 1963 for graduates of French-speaking universities and for all others. Shown separately are the salaries of French Canadians as a percentage of the average. It is quite clear from the chart that the graduates of the French-language universities have a significant income advantage over other graduates.

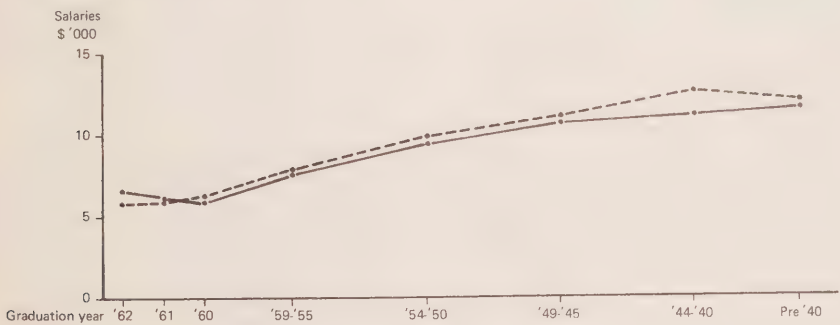


Figure III.5  
Professional achievement of university graduates in Quebec, Bachelor level: Engineering (all branches)

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities ----, and other universities ———



Number:								
French	36	127	151	515	268	139	76	94
Other	40	132	176	836	284	528	279	489
Salary (\$):								
French	6,166	6,232	6,347	7,700	9,942	11,366	12,815	12,212
Other	6,862	6,287	6,289	7,665	9,646	11,074	11,387	11,865
Salary as % of average:								
French	94.4	99.6	100.5	100.3	102.4	102.1	109.6	102.4
Other	105.1	100.4	99.6	99.8	99.3	99.5	97.4	99.5

Engineers, of course, are not much more alike than scientists, and a comparison of French Canadian and other engineers, especially in the early years, is a comparison of groups of individuals with quite a different mix of training.

To illustrate this fact, Table III.7 gives the professional mix of the 583 engineers in our sample (both French and other) who graduated before 1940. It also shows the professional mix of the French Canadian engineers. It is easy to see, even without a slide rule, that the output of the French-language universities was very different 25 years ago from that of other universities.

Table III.7

The professional "mix" of engineers who graduated before 1940

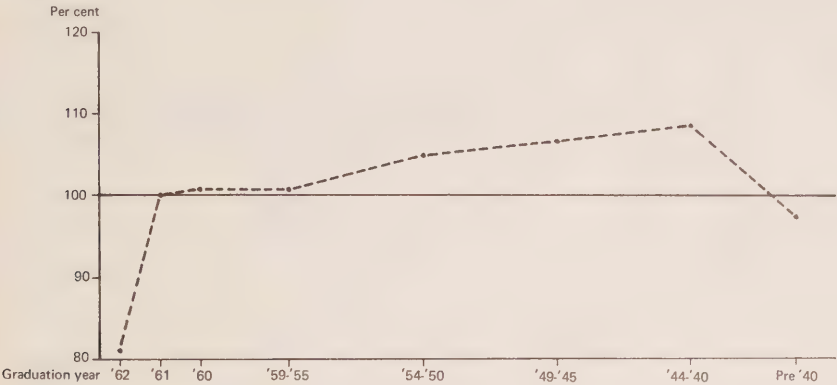
Engineering branch	Total no. of graduates	No. of graduates of French-language universities
Chemical	68	3
Civil	163	69
Electrical	146	2
Mechanical & industrial	122	1
Mining & geological	43	0
Metallurgical	11	0
Other	30	19
Total	583	94

In order to make a more precise comparison of the fortunes of French Canadian and other engineers in each of the different branches of engineering, separate charts are shown for civil, chemical, electrical, mechanical and industrial, mining and geological, and metallurgical engineering (Figures III.6 to III.11). Similar information is available for engineering physics and miscellaneous, but these are not shown, in the first case because the data are thin and in the other because the category is undefined.

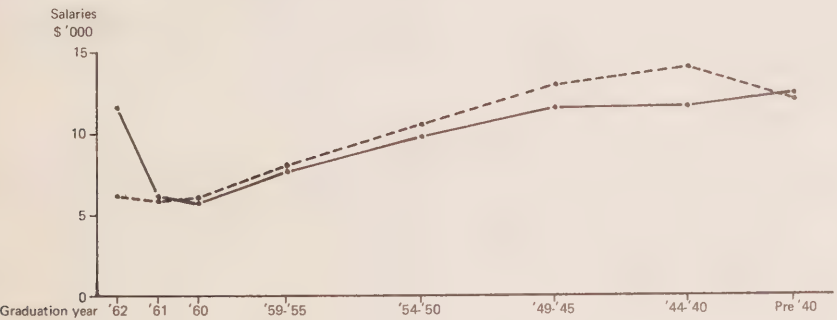
In interpreting these charts one must note that the number of French Canadians in particular branches of engineering and particular graduating classes in the sample and in the relevant universities, especially during the early years, is sometimes quite small, with the result that there is much random and meaningless variation from class to class. The few cases in the early years coincide with the commencement of the different professional programmes in the French-language universities. Where the relative performance of the French Canadians seems to rise in a consistent way from before 1940 to the present, as it does in chemical, electrical and metallurgical engineering, we can postulate that we are observing the development of both the quantity and quality of a new programme. The other branches

Figure III.6  
Professional achievement of university graduates in Quebec, Bachelor level: Civil engineering

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities ----, and other universities \_\_\_\_\_

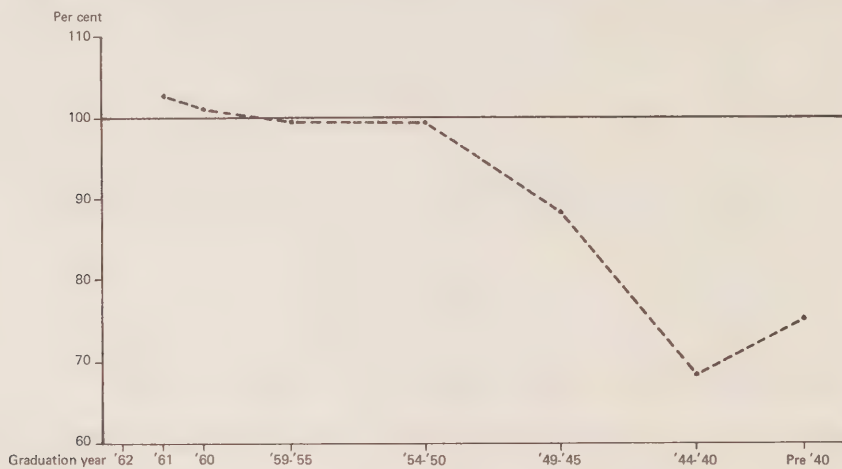


Number:								
French	13	49	60	217	109	46	42	69
Other	6	28	37	159	175	107	41	94
Salary (\$):								
French	6,730	6,561	6,650	8,142	10,738	13,054	14,190	12,014
Other	11,750	6,571	6,500	7,965	9,922	11,845	11,902	12,574
Salary as % of average:								
French	80.9	100.0	100.9	100.9	104.9	106.9	108.7	97.4
Other	141.3	100.1	98.6	98.7	96.9	97.0	91.1	101.9

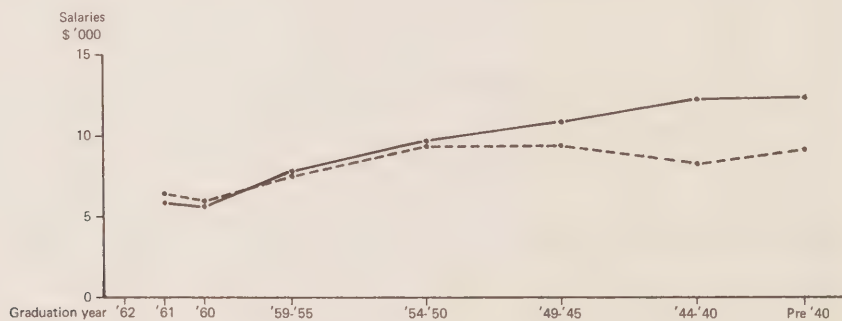
Figure III.7

Professional achievement of university graduates in Quebec, Bachelor level: Chemical engineering

Salary of graduates of French-language universities as a percentage of average



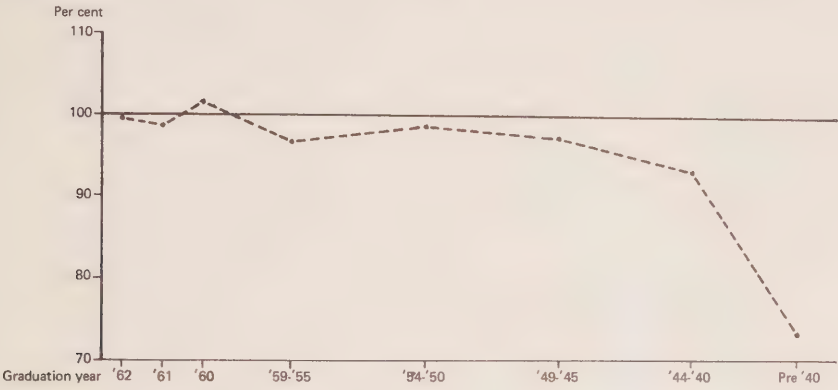
Average salaries of graduates of French-language universities ----, and other universities ———



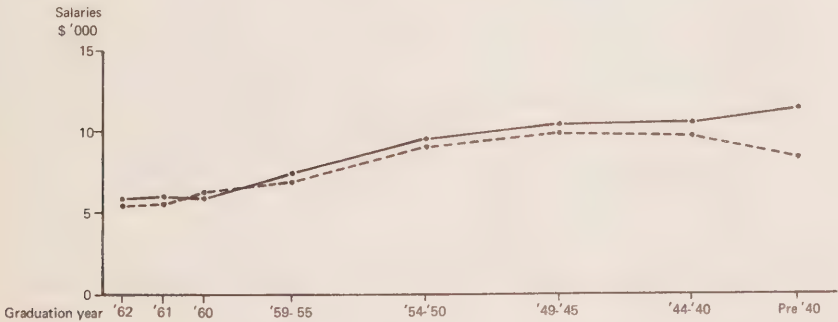
Number:								
French	—	4	15	36	21	17	4	3
Other	2	12	19	119	133	85	59	65
Salary (\$):								
French	—	6,500	6,100	7,555	9,404	9,441	8,250	9,166
Other	6,000	6,250	5,973	7,584	9,462	10,947	12,262	12,300
Salary as % of average:								
French	—	103.0	101.2	99.7	99.5	88.3	68.7	75.4
Other	—	99.0	99.1	100.1	100.1	102.4	102.1	101.1

Figure III.8  
Professional achievement of university graduates in Quebec, Bachelor level: Electrical engineering

Salary of graduates of French-language universities as a percentage of average



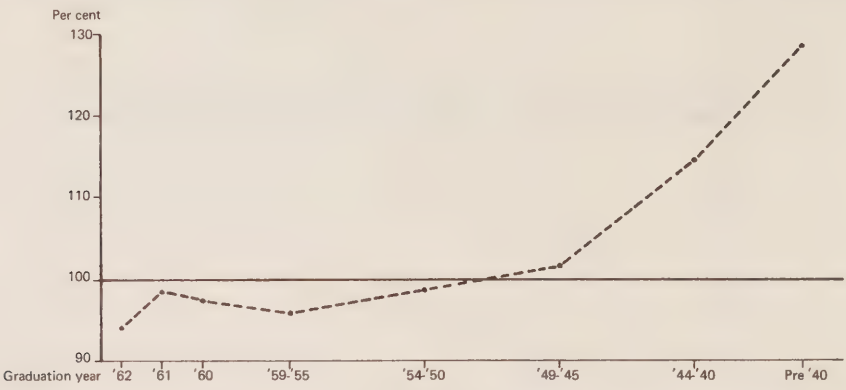
Average salaries of graduates of French-language universities ----, and other universities ———



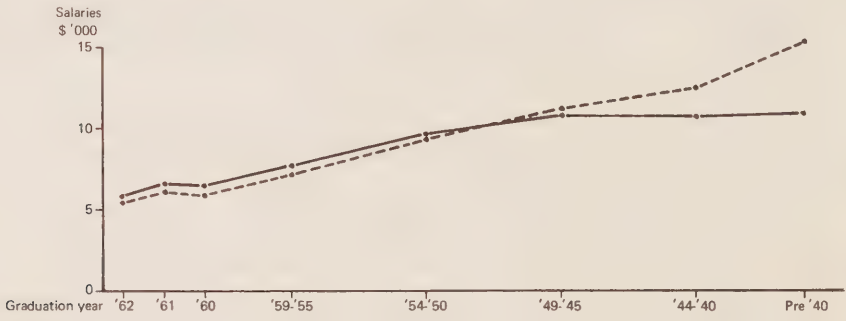
Number:								
French	12	40	25	63	45	28	6	2
Other	11	45	51	218	203	123	53	144
Salary (\$):								
French	5,916	5,950	6,140	7,160	9,600	10,089	9,833	8,500
Other	5,954	6,077	6,009	7,449	9,736	10,434	10,575	11,597
Salary as % of average:								
French	99.7	98.9	101.5	96.9	98.9	97.3	93.7	73.6
Other	100.3	101.0	99.3	100.8	100.3	100.6	100.7	100.4

Figure III.9  
Professional achievement of university graduates in Quebec, Bachelor level: Mechanical and industrial

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities ----, and other universities —

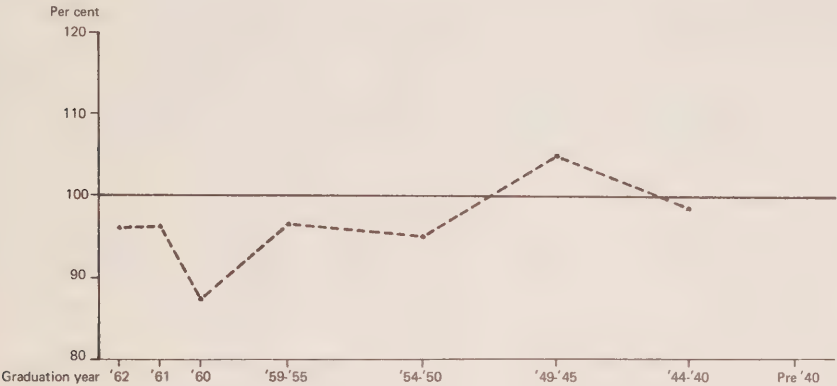


Number:								
French	6	17	29	52	14	4	1	1
Other	19	30	49	259	289	156	80	121
Salary (\$):								
French	5,500	6,264	6,086	7,288	9,357	11,375	12,500	14,500
Other	5,973	6,400	6,357	7,652	9,467	11,128	10,925	11,285
Salary as % of average:								
French	93.9	98.6	97.3	96.0	98.9	102.2	114.2	128.2
Other	101.9	100.8	101.6	100.8	100.1	99.9	99.8	99.8

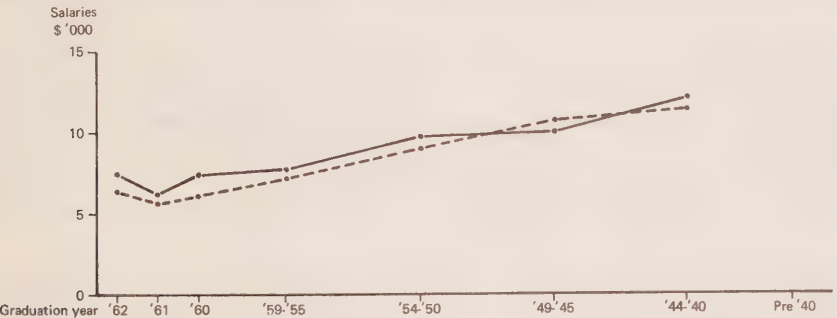


Figure III.10  
Professional achievement of university graduates in Quebec, Bachelor level: Mining and geological

Salary of graduates of French-language universities as a percentage of average



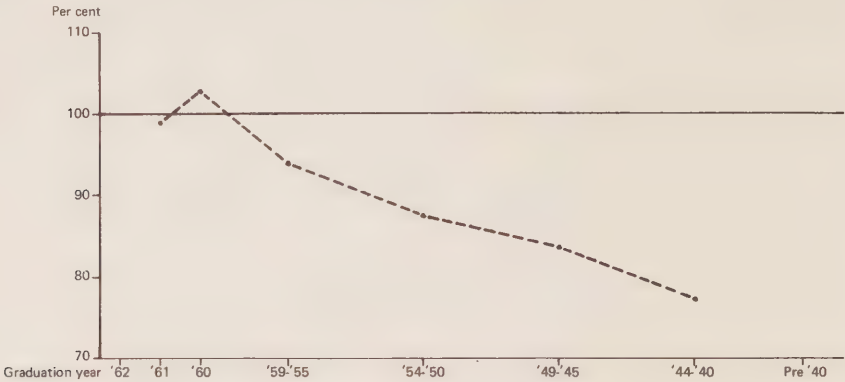
Average salaries of graduates of French-language universities ----, and other universities \_\_\_\_\_



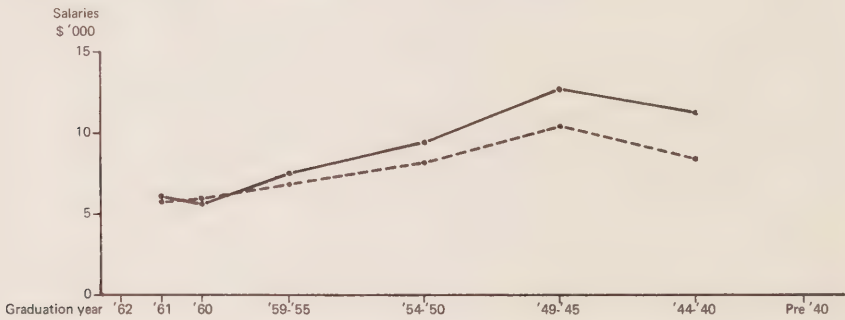
Number:								
French	3	6	4	31	26	6	8	0
Other	1	7	10	41	44	22	24	43
Salary (\$):								
French	6,500	5,833	6,250	7,370	9,000	10,916	11,750	—
Other	7,500	6,214	7,500	7,768	9,704	10,250	11,958	11,988
Salary as % of average:								
French	96.3	96.6	87.5	97.0	95.3	105.0	98.7	—
Other	111.1	102.9	105.0	102.3	102.8	98.6	100.4	—

Figure III.11  
Professional achievement of university graduates in Quebec, Bachelor level: Metallurgical

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities ----, and other universities ———



Number:								
French	—	6	7	15	5	2	2	0
Other	1	2	6	21	26	19	16	11
Salary (\$):								
French	—	5,833	6,214	6,966	8,100	10,500	8,500	—
Other	5,500	6,000	5,833	7,738	9,461	12,763	11,312	13,227
Salary as % of average:								
French	—	99.3	102.9	93.9	87.7	83.7	77.3	—
Other	—	102.1	96.6	104.3	102.4	101.7	102.8	—

of engineering in the French-language universities seem to have been strong from the very first.

The largest branch of engineering and the one which accounts for over 45 per cent of the French Canadian graduates is civil. This is perhaps the most important group to analyse, partly because French Canadian civil engineers are by far the most numerous in the sample, but more important because the graduates of French-language and other schools are probably the most homogeneous from the point of view of professional qualifications. Figure III.6 shows that the students of the French-language universities who have graduated since the beginning of the Second World War have a clear and significant advantage over graduates of all other universities. Those who graduated in the 1920s and 1930s, on the other hand, are at a 2.6 per cent disadvantage.

Two additional tests were made of the relative achievement of French Canadian engineers. The first concerned those who went on to higher degrees, and the second those who went to work in Ontario. Figure III.12 compares the salaries of the 54 professional engineers at the Master's level who have taken their undergraduate training at French-language universities with 289 engineers at the same level who attended other universities. Again, the advantage clearly lies with the French Canadians, but in a more pronounced way than was the case at the Bachelor's level.

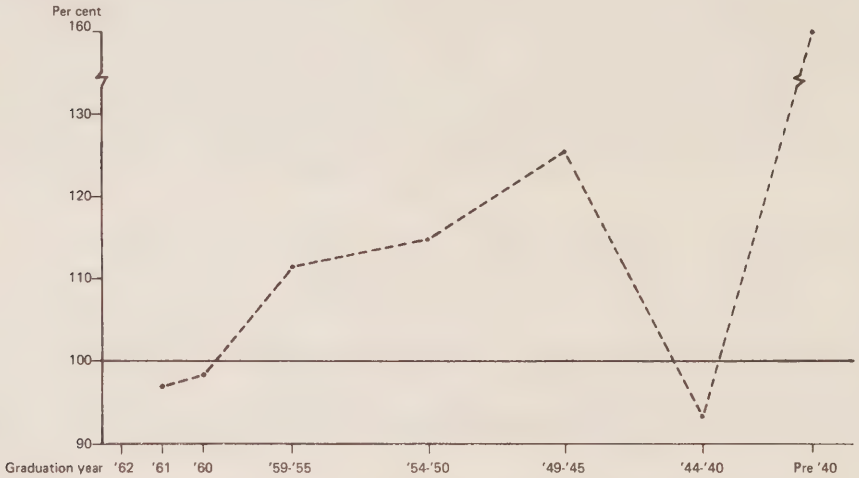
It may be assumed that most of the Master's degrees, especially those taken in the 1940s or earlier, were obtained at English-language universities and that almost all of the 54 French Canadians represented in our chart would therefore have a sufficient command of English to be able to earn a university degree in it. It is probably for this reason that their premium exceeds that of the French Canadians with only Bachelor's degrees, many of whom may not be so bilingual.

Further evidence of the importance of language can be found in the experience of the French Canadians with Bachelor of Engineering degrees who are working in Ontario. This evidence is presented in Table III.8, which shows branch of engineering, year of graduation, salary, and the number of graduates from French-language and other universities. Also shown is the income of the French Canadians as a percentage of the average. Again, the number of French Canadians in each individual discipline-graduation-class category is too small to be conclusive. But one is impressed by the fact that all recent graduates from the French-language universities working in Ontario were at an income disadvantage while, on balance, all those who graduated before 1960 were almost exactly on a par with graduates from other universities. A possible explanation of this phenomenon is that the recent graduates from Laval, Sherbrooke, and l'École polytechnique may have a language handicap. In fact a feeling of deficiency in their command of English may be the very reason why some of them have moved to Ontario. We can probably assume on the other hand

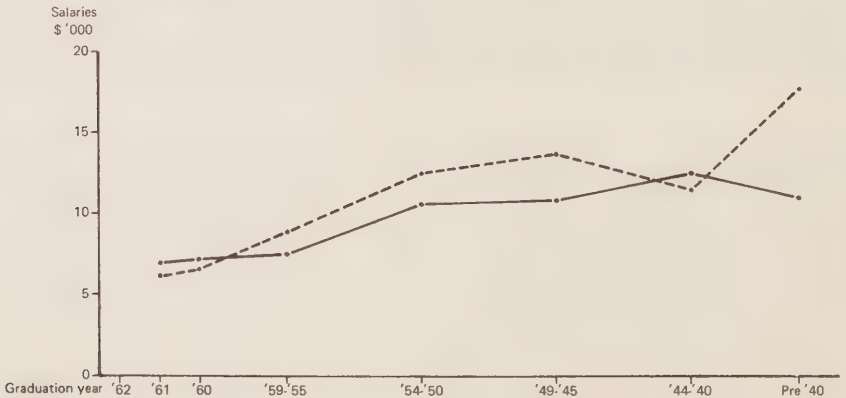
Figure III.12

Professional achievement of university graduates in Quebec, Bachelor level: All engineering

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities ----, and other universities \_\_\_\_\_



Number:							
French	—	3	6	22	12	3	4
Other	—	4	3	31	44	60	113
Salary (\$):							
French	—	6,166	6,500	8,909	12,541	13,500	11,625
Other	—	6,500	6,833	7,370	10,522	10,641	12,544
Salary as % of average:							
French	—	97.0	98.3	111.2	114.5	125.3	93.4
Other	—	102.3	103.4	92.0	96.1	98.7	100.8

Table III.8

Engineering graduates at the Bachelor level of French-language universities working in Ontario compared with graduates of other universities in the same discipline and graduation year

Discipline	Graduation year	French		Other		French as per cent of average
		No.	Average salary	No.	Average salary	
Civil	62	3	\$ 5,833	30	\$ 6,200	94.6
	61	3	5,833	72	6,138	95.2
	55 - 59	2	8,500	397	7,484	113.5
	50 - 54	3	7,833	472	9,694	80.9
	40 - 44	1	12,500	57	11,394	109.5
	Pre-40	5	13,100	222	11,522	113.4
Chemical	62	1	5,500	25	5,740	96.0
	61	1	5,500	44	6,250	88.2
	55 - 59	2	7,500	294	7,350	102.0
Metallurgical	60	1	5,500	14	6,785	82.1
	55 - 59	1	6,500	32	7,375	88.5
	50 - 54	3	9,833	69	9,326	105.2
	45 - 49	2	11,000	49	10,204	107.5
Mining & geological	55 - 59	3	6,166	59	7,211	86.1
	50 - 54	3	9,166	84	9,196	99.7
Engineering physics	55 - 59	1	6,500	58	7,396	88.1
Mechanical & industrial	62	4	5,500	36	6,083	91.3
	61	1	5,500	69	6,195	88.9
	55 - 59	1	8,500	540	7,588	112.0
	50 - 54	1	10,500	688	9,252	113.5
Electrical	55 - 59	5	7,500	336	7,446	100.7
	50 - 54	3	8,500	546	9,091	93.5
	45 - 49	4	9,000	401	10,068	89.5
Total		54		4,594		

that those of the older age groups who are in Ontario, are able to operate effectively in English, and such individuals, so far as income is concerned, seem to have achieved professional parity.

There are not enough engineers in professional work with Ph.D. or Master's degrees in Ontario or with Ph.D.'s in Quebec to warrant separate tables. In Ontario and Quebec combined there are only 17 individual engineers from French-language universities in professional (non-management, non-educational) work who have gone on to

acquire Ph.D.'s. Of these, five were in Ontario at the time of the survey.

Having suggested that there is a close relationship between the level of education and mobility among scientists, we should point out that the same generalization seems to hold for engineers. Of engineering graduates with Bachelor's degrees from the French-language universities in our sample, 3.7 per cent were working in Ontario. The corresponding percentages for Master's and Ph.D.'s were 7 and 34 per cent respectively.

### *E. Ethnicity and Professional Achievement*

The conclusion one reaches from the foregoing analysis is that when one begins with overall income achievement, one finds that the average French Canadian (or more properly the average resident of Quebec) does not have an income as high as the average resident of Ontario. The main explanation, it is suggested, is the different levels of education in the two provinces. If this is true, we should find that when we can identify groups of French and other Canadians who have comparable education, their incomes should be very similar. This has been demonstrated by the foregoing analysis of professional architects, scientists and engineers. Generally speaking, the closer we approached the ideal of comparing exactly similar groups, the smaller was the income spread between the two groups. Indeed, the advantage seems to lie with the French-speaking Canadian.

It would, of course, be absurd to pretend that education is the only variable explaining income differences, and having underlined the overriding importance of education, we may go on to suggest that ethnicity and perhaps language may also be factors in determining achievement of ethnic or language groups.

English-speaking managers might very understandably prefer to promote English-speaking, English-thinking candidates with whom they find communication easier. On the other hand a promotion must also take into account the social equilibrium and the motivation and productivity of the total work force. While the head design engineer, for example, might like to have a like-thinking assistant, if his work force is made up of people from other ethnic groups, he might find it desirable to give the job to the best available candidate with an ethnic background different from his own. Recognition of the facts of ethnicity or tribalism is not necessarily therefore in opposition to a mechanistic profit-maximizing view of business. The loss of productivity incurred by the promotion of a man whose command of English is less than might be desired may be made up by an increase in productivity elsewhere. From this it is clear that social pressure and feelings of tribalism or ethnicity could influence promotions and salaries, and it would follow that the more intense the feelings of nationalism or tribalism, the more this factor would have to be taken into account in determining promotion.



While there is, so far as the author knows, no documentation to support this view, it was my impression, as one of the authors of a study of corporate practices and policies of American subsidiaries in Canada a few years back, that the "tribal" noises which some Canadians were making caused some American firms to seek Canadian replacements for American managers.<sup>3</sup> In some cases, it was felt by the American companies that they had to promote the second-best people available who suddenly, for social and political reasons, became the best people to fill the jobs. Regretfully making these second-best appointments could not be looked on as moves to improve the productivity of the Canadian firm, but were rather holding actions to solve a social problem which might conceivably cause Canadian productivity to decrease.

The problem faced by the American firm in Canada is very similar to that of the English Canadian firm in Quebec. The proportion of the Canadian population with higher degrees—especially in business subjects—is very much smaller than that of Americans. The ratio of current output of M.B.A.'s, for example, is about one to seven per thousand of population. The American firm that feels it must replace an American with a Canadian is almost certainly going to have to settle for an individual with less education and certainly less business education. A similar situation holds of course for the firm controlled by English Canadians who feel they must replace an English Canadian with a French Canadian. If it is right that at least some shift occurred from American to Canadian personnel in the higher paid jobs, would it not be logical to expect some such shift in favour of French Canadians in Quebec?

Because data were collected over a period of three rather sensitive years in which relationships between French and English Canadians were being publicly examined, it was possible to determine statistically whether any shift in the position of French Canadians did in fact occur. In undertaking to analyse the shift in the income of French Canadians relative to all others over a fairly short period of time, a new problem arose concerning the size of sample. Previously in this chapter the emphasis has been on the relative incomes of French and other Canadians at given periods in time rather than with change over a period of time. In order to be able to make fair comparisons of professional achievement, we wanted to isolate groups of professionals who were as nearly similar as possible, and this led to breaking the data into categories or cells by discipline, year of graduation and function performed. However, the more detailed the breakdown, the fewer the number of individuals in each cell, so that in order to keep the number of cases or individuals in each cell up to a statistically respectable number, the 1962, 1963 and 1964 surveys were combined.

Given the desire in the present case to separate and compare 1962 and 1964 data, it seemed desirable to combine the data in some other way. The solution was to sacrifice the functional breakdown and to combine the professional, managerial and educational categories on

the assumption that over the space of two years the relative importance of these groups would not change significantly.

Of course if the distribution of French-speaking and other engineers among the professional, managerial and educational categories is different (which it is), then the combined French and other groups are less similar and a comparison of their absolute wages less significant. However, here we are not concerned with comparing like with like but only with measuring the sensitivity of corporate policies to the pressure of social and public opinion.

Figure III.13 shows absolute and relative income positions of French-speaking engineers doing professional, educational and managerial work at the time of the 1962, and again at the time of the 1964, surveys. Naturally the salaries in 1964 are higher than those reported in 1962 but it also appears that the French Canadian engineer has increased his salary slightly more than other engineers in the province.

Although there is some random variation in the survey results, the charts do indicate a slight improvement in the relative position of French Canadians during the period studied. The weighted average disadvantage of all engineering graduates from French-language universities reporting in the 1962 survey was 2.36 per cent while the 1964 survey indicated that the gap had narrowed to 1.36 per cent. Within a two-year period French Canadian graduates had improved their salary position by 1 per cent in relation to the average.

The improvement, however, was not uniform in all age groups. The French Canadian graduates of the 1940s and 1950s received almost all the benefits; the older graduates seem to have benefited not at all.

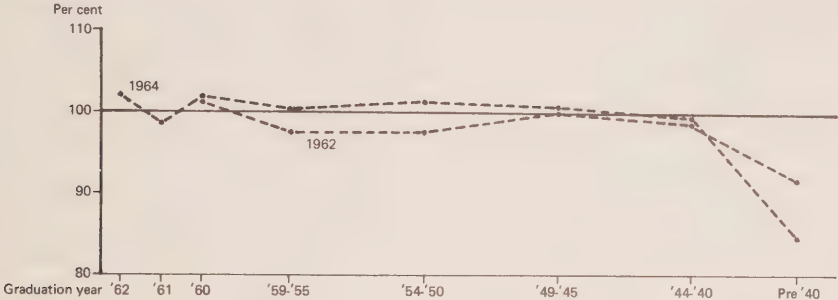
A much more dramatic (though statistically a much less significant) improvement is to be found in Figure III.14, which shows the change in the relative positions of the graduates of French-language universities from the 1962 to the 1964 survey who went on to earn a Master's degree. The 60 engineers with Master's degrees in the 1964 survey have an income advantage of over 9 per cent, while the 39 graduates included in the survey two years earlier reported an income disadvantage of over 5 per cent.

A reasonable hypothesis may be suggested to account for these observations. Business is primarily concerned with making a profit, and the businessman will probably think very little about ethnicity, religious differences and so on since normally these matters have little to do with the efficient operation of his business. In general, then, if education explains productivity, people who have similar educational backgrounds and similar abilities and therefore similar productivity potential will normally be treated in about the same way—and this is demonstrated by the data.

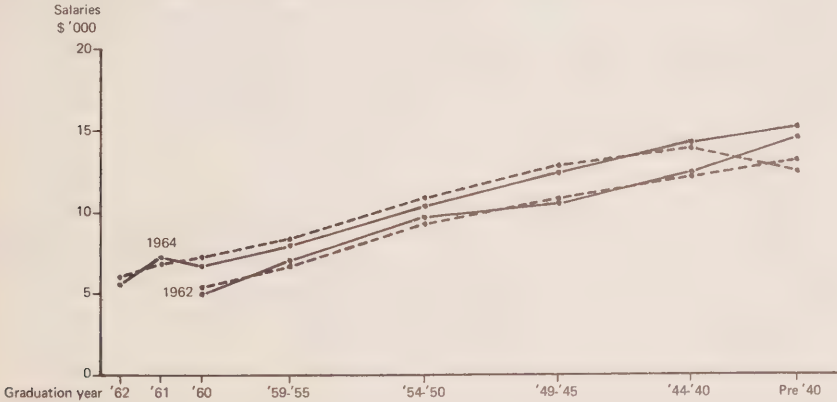
It must be recognized that this conclusion flies in the face of our conventional wisdom on the nature and extent of prejudice. The

Figure III.13  
Professional achievement of university graduates in Quebec, Bachelor level, 1962 and 1964 surveys: Engineering (all branches)

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities ----, and other universities \_\_\_\_\_



1964 Survey

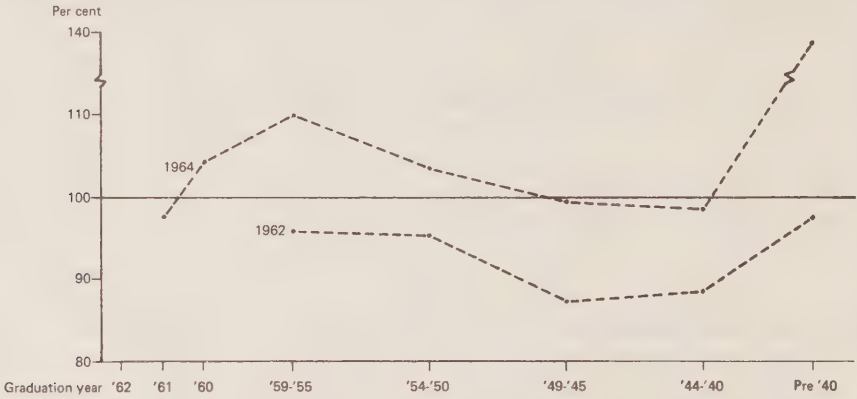
Number:							
French	80	75	57	201	125	86	49
Other	82	55	53	267	384	286	156
Salary (\$):							
French	6,137	6,620	7,008	8,490	11,060	12,918	13,612
Other	5,915	6,809	6,745	8,468	10,863	12,842	13,673
Salary as % of average:							
French	101.9	98.8	101.9	100.2	101.4	100.5	99.7
Other	98.2	101.6	98.0	99.9	99.6	99.9	100.1

1962 Survey

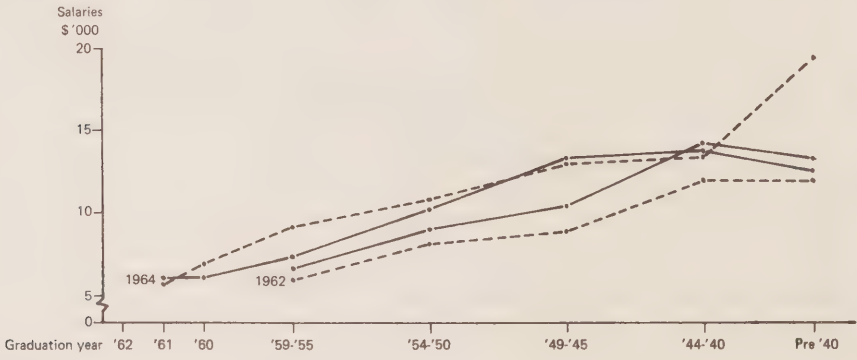
Number:							
French	—	—	44	189	132	80	49
Other	—	—	74	306	419	296	165
Salary (\$):							
French	—	—	5,613	6,785	9,143	11,050	12,377
Other	—	—	5,486	7,044	9,406	11,035	12,506
Salary as % of average:							
French	—	—	101.5	97.7	97.9	100.1	99.2
Other	—	—	99.2	101.4	100.7	100.0	100.2

Figure III.14  
Professional achievement of university graduates in Quebec, Master's level, 1962 and 1964 surveys: Engineering (all branches)

Salary of graduates of French-language universities as a percentage of average



Average salaries of graduates of French-language universities -----, and other universities \_\_\_\_\_



1964 Survey									
Number:									
French	1	5	6	15	16	2	6	9	
Other	—	4	4	14	22	24	21	59	
Salary (\$):									
French	7,500	5,700	7,000	9,233	11,031	13,000	13,416	19,388	
Other	—	6,000	6,250	7,428	10,409	13,083	13,666	13,152	
Salary as % of average:									
French	—	97.7	104.5	110.4	103.4	99.4	98.6	138.7	
Other	—	102.9	93.3	88.8	97.5	100.1	100.4	94.1	
1962 Survey									
Number:									
French	—	—	1	14	13	3	3	5	
Other	—	—	—	14	28	52	18	63	
Salary (\$):									
French	—	—	4,500	6,571	8,423	9,166	12,000	12,100	
Other	—	—	—	7,142	9,035	10,557	13,777	12,507	
Salary as % of average:									
French	—	—	—	95.8	95.3	87.5	88.7	97.0	
Other	—	—	—	104.2	102.2	100.7	101.9	100.2	



WASP's\* of St. James Street and Bay Street, like their American colleagues of Wall Street, are supposed to operate a closed club where there is no room for Hungarians, Jews, French Canadians, Russians, or anyone else whose name is not Jones, or preferably Jones-Jones.

The data do not support this belief, and, moreover, it may be that corporate policies and practices are in force which are specifically designed to refute the view that businesses operate as closed ethnic clubs. Indeed, recognition of ethnicity may become economically important in the operation and even in the survival of a business. If productivity, motivation, sales and costs are likely to be influenced by the perceived ethnic policies and practices of a firm, the rational businessman will give ethnicity the same careful consideration he would normally give to any other factor likely to influence his costs. Businessmen seem to have enough leeway, at least in the short run, to accommodate to ethnicity and to hire and promote individuals using ethnicity as one of the relevant factors. The awareness of the importance of ethnic origin, however, will not alter the fortunes of all French Canadians in the same way—at least, it does not seem to have done so thus far; and it is suggested that the key to understanding which individuals benefit and which do not is probably not ethnicity but language and education.

Our survey results make it perfectly clear that as one rises in the hierarchy of a Quebec company, the relative importance of French and English shifts in favour of English—and this is every bit as true for a company owned and operated by French Canadians as one owned by, say, Americans.<sup>4</sup>

It is apparently not difficult for a unilingual French Canadian engineer to enter most firms in Quebec and to work and progress for many years in the company without being called upon to work effectively in the English language. In fact in his first jobs where many of his subordinates and colleagues will be unilingual French, an effective command of French will be vital, whereas an understanding of English may be much less important. However, as he rises to the point where business contacts outside the company, the province, and the French Canadian milieu become more frequent, the importance of English will increase. Sometimes this may happen abruptly as he moves from one professional or managerial level to the next, and he may have little time for adjustment. It is easy to imagine that this language filter works to the disadvantage of the older French Canadian who took his university education in French and perhaps continued to use French almost exclusively at his work and in his home. After a normal career up to, say, the age of 50 in which he may have been as successful as his English-speaking colleague, he may find himself suddenly confronted with the need to communicate effectively with customers or suppliers outside the province. Any disadvantage

---

\*White Anglo-Saxon Protestants.

which he has in this regard will seriously affect his productivity and his further progress in the company.

Faced with the desirability of hiring and promoting more French Canadians, the rational firm looking for engineers will be interested in hiring more young French Canadians. These young professionals can be employed in the French-language environment where they will be fully effective; more important, they are young enough to learn English and perhaps work for a time in company locations outside Quebec as part of their training careers. It is therefore easy to understand why the demand for young, well-trained French Canadians should rise to the point where they command a premium on the market. On the other hand the older French Canadian engineers with Bachelor's degrees have not experienced any increased demand for their services; indeed, if anything, their relative position has declined. The position of the average French Canadian engineer who graduated before 1940 with a Bachelor's degree contrasts sharply with the position of the engineer of the same age who went on to a Master's degree. Undoubtedly, French Canadian engineers with Master's degrees received an education comparable to the engineers of other ethnic groups since they went to the same universities, but what may be of greater importance is that their instruction was mostly in English. French Canadians who made the adjustment to English some time ago, by taking a higher university degree, did not lose their ability to use French; instead they gave proof of being able to work, argue, persuade and command (as well as learn) in English.

Such people would be at no disadvantage in an English-language environment and, indeed, so long as they remained in Quebec, their earlier French training and language skill would be a factor working strongly in their favour. If they did meet prejudice, as undoubtedly they would from time to time, it would not outweigh the commercial advantage to their employers of their knowledge of French. The result of the increased demand for the limited number of older French Canadian engineers with Master's degrees who presumably know English is that these people apparently command a premium on the market, presumably for the same reason as the young French Canadian engineers just coming out of college do now.

In summary we see that the French Canadian engineer acting as a professional (that is, in a capacity outside management or education) has something of an income advantage. His relative advantage is not so marked as that of the architect, but it is appreciably greater than that of the scientist.

It has been suggested that this "pecking order" fits with the temporal and qualitative development of the different areas in the French-language universities, that is to say that architecture ranked with law and medicine as an honoured profession in French Canada and was one of the first developed in the French-language universities. Engineering was probably the next profession to develop quantitatively and qualitatively, especially in l'École polytechnique which had a



fair measure of autonomy and was therefore in a position to escape from the pattern of classical education.

Science, on the other hand, had to fight its way out of the pattern of classical education (as it did elsewhere in the world). At first science options crept into the *cours classique* until finally a sequence of courses became identified as a *cours scientifique*. Until fairly recently, however, such science courses were relatively few and served to identify a variant of a programme which was still basically general, and was classically oriented. Certainly the attitudes and the historical developments described above seem to fit neatly into the statistical findings concerning the relative achievement of architects, engineers and scientists from French-language universities.

#### *F. A Tentative Conclusion*

The analysis of this chapter suggests an important conclusion—one which will probably come as a surprise to most Canadians and even to most social scientists. As noted earlier, the difference in income between French- and English-speaking Canadians is large enough to be perceived and to become accepted as a fact—which it is. This difference in income appears to be a major source of grievance to French-speaking Canadians and a source of embarrassment to some English-speaking Canadians.

The sense of grievance and disquiet comes, it seems, from the suspicion that English-speaking Canadians have been, in some sense, unfair or prejudiced. While no survey is available to prove this point, it appears, nevertheless, that a majority of Canadians believe that even if a French Canadian member of the labour force had the same education as an English-speaking Canadian he would not earn as much money; and it appears further, that while they might be reluctant to admit it, most Canadians would attribute at least some fraction of the income difference to prejudice which works to the disadvantage of French-speaking Canadians.

In our analysis of the labour force in the previous chapter it was argued on *a priori* grounds that a tendency to pay any large group of workers less than what was being paid to equally productive workers elsewhere simply could not persist.

In this chapter we have concentrated on the professionals—who might be called the aristocracy of the non-management labour force. As closely as possible, we have tried to compare like with like. This comparison, which is more precise than any other known to have been carried out so far, shows that not only has the "perceived income difference" completely disappeared, but also that the French-speaking professional has perhaps just a slight income advantage over his English-speaking colleague with the same professional training. It must be clear at this point that, so far, we have done nothing

more than challenge a myth. Certainly, our analysis shows that ethnicity plays a much smaller role in determining income than would seem to be assumed by most opinion leaders who have addressed themselves to this subject.

It is acknowledged, however, that other hypotheses and other data must be explored. For example, it has been suggested that since good English-speaking professionals would tend to be promoted into management positions while French-speaking Canadians would not, the average quality of the remaining French-speaking professionals would be higher than that of the remaining English-speaking professionals. If this were the case, wage parity would imply that the better French-speaking professionals were still being exploited, since they should be paid more than their below-average, unpromoted, English-speaking colleagues. This is a reasonable hypothesis, but like-for-like, it seems that the French-speaking professional actually is paid a bit more. Furthermore, as we shall see in the next chapter, a rather higher percentage of French-speaking professionals is promoted to management positions and, by the above reasoning, we would expect them to be paid a bit less than their English-speaking colleagues.

It is doubtful, however, that the data can be used to support or contradict such subtle arguments. They do, however, suggest that, at least as far as the labour force is concerned, one ethnic group has about as good a chance of improving its economic position as any other. The analysis further indicates that education is a key factor in determining income.

The previous chapter examined the economic achievement of certain groups of professionals. It was found that income was closely associated with education and age and that professional people of the same age and with the same education tended to earn about the same salary. It is much more important in Canada to be a university graduate than it is to be an English Canadian. The French Canadian professional engineer earns a great deal more than the English Canadian high school graduate; indeed he earns about the same as the English Canadian engineer with similar training. Moreover, there appears to have been a slight tendency for French Canadians to improve their economic position in comparison with other Canadians over the period from 1962 to 1964. Where there are persistent differences in income (for example, the failure of the pre-1940 French Canadian graduate at the Bachelor's level to improve his relative position), the explanation seems to be associated with language skills or the quality of education rather than with ethnicity *per se*. The pre-1940 engineer with a Master's degree (who is almost certainly bilingual) has improved his position considerably. The economic disadvantage of the French Canadian scientist seems to be a function of the kind of science course he has taken. The French Canadian architect seems to have a clear advantage over others practising the profession in Quebec.

From this it may be concluded that if ethnicity or a lack of fluency in English was at one time something of a disadvantage to the French Canadian, now, ethnicity itself may be working to his advantage—at least to the advantage of the French Canadian who is young or who has a good knowledge of English. This seems to confirm an observation made by the staff of the Graduate School of Business at McGill University that, other things being equal, a bilingual French Canadian is paid a premium for his ethnic origin on today's market. It may be argued, therefore, that since income levels for French, and other, Canadians with equivalent education are approximately the same

and seem, moreover, to be moving in a direction which favours French Canadians, dissatisfaction with the economic status of the French Canadian should disappear.

#### *A. Social Significance of Managerial Achievement*

To assume simply that equal incomes would mean equal levels of satisfaction, however, would be to take a very old-fashioned view of human nature. Man is not simply an economic being. He has a hierarchy of wants and needs. A hungry man may struggle single-mindedly for food, but once he has satisfied his hunger, he does not stop struggling. After a man has obtained his basic economic wants, he continues to strive, but for "higher" social goals such as status, recognition, and self-development. Many of these higher wants or needs are associated with managerial positions, and this makes entry into the management stream especially desirable. Any person who feels himself to be unfairly excluded from becoming a manager or from climbing the managerial ladder to the top is likely to be a frustrated and unhappy person.

Since in fact there is not always room at the top, there are inevitably many people who learn to live with some of their social wants unfulfilled. This may pose personal problems for these individuals, but such problems do not add up to a political problem unless those excluded from management positions can in some way be differentiated from those who are not, and unless this difference can be used as the basis for organizing a political protest movement.

To put the matter a little differently, there are positions in any society which may make their occupants more or less unpopular; money-lending, land-owning, and management are examples which come to mind. In particular, it is not too difficult to see why managers should be somewhat unpopular: they are more affluent than the managed, and the exercise of their power reduces the power and freedom of those being managed. Thus it is easy to see why the managers are vulnerable to criticism, jealousy and protest. However, provided the managed and the managers are relatively similar—provided they are recognized as belonging to the same tribe—it may be difficult to organize an effective political protest against the managers. This is partly because they are, after all, tribe members and partly because most of the malcontents who are likely to be effective in leading a political protest are also candidates for entry into the ranks of the managerial class.

But let the managed and the managers be of two different tribes or colours or nations or language groups, and further, let these tribal differences be perceived, rightly or wrongly, as an insurmountable barrier, then the personal frustrations of those who do not enter the managerial class may quickly add up to a political problem. Many of the most unpleasant aspects of the ideologies of colonialism, racism,



anti-colonialism, and nationalism can be fostered by actual or supposed lack of common interests between the managers and the managed.

Of course the managers in any society are not found only in business. There are managers in government, church, school, cultural and social groups; in cities, courts, and families. In a North American context at least, these managers seem to be drawn more or less pro rata from the different ethnic groups. To our knowledge, no one has yet suggested that French-speaking Canadians in Quebec are under-represented in the management of churches, clubs, schools, families, or political institutions. Indeed, if one looks at the management of, say, the city of Montreal, French-speaking Canadians are over-rather than under-represented.

The focus of this study, however, must be on business and on business managers. We should recognize that North American business managers are not quite the same as the managers in some other aspects of our social life: not only are they themselves managed or regulated by the courts, the shareholders, the laws and the civil servants, but they are also closely regulated by each other and by their customers. Indeed, it could be argued that of all the various types of managers that exist in society, business managers are the least important and the least powerful from the social and political points of view.

This argument is quite contrary to the more usual view of the businessman as a puppeteer who has but to pull strings to make civil servants and politicians jump. Perhaps, at one time, such a view was essentially correct; but in my personal experience as a business and government consultant who has been closely involved with a number of important economic-political decisions, I have never found that this view of the power of business managers accorded with the facts. A cabinet minister or a provincial premier wields social power that is quite unmatched by that of the president of the largest corporation. Of course, one man's experience does not prove very much, but, on a broader scale, how does one reconcile the drift of current government legislation towards more transfer payments, medicare, freer trade, and more regulation of business with the view that big business is "running the country"?

At the same time, no one is going to deny that business managers have power, and whether this power is great or small, if French Canadians feel that English Canadians have an unfair advantage in obtaining managerial positions in business they are very likely to experience frustration, and quite properly so. Any English Canadian who has any trouble understanding this feeling might reflect on the speeches which are made from time to time about American companies which, it is alleged, are not hiring Canadians for the top jobs.

*B. Managerial Achievement Ratios*

Our problem then is to determine what kind of representation French Canadians have in management, to understand and explain the facts, and to consider what role, if any, education and language may play in determining who is to manage, and who is to be managed.

There are several ways of defining "manager." In the census returns the Dominion Bureau of Statistics has a vocational classification called "managerial," and the people in this category are those who have selected that particular term over all others as best describing their function. It can also be argued that almost anyone who has an income of \$10,000 or more performs at least some management functions. Many of the professionals who were the subject of the last chapter undoubtedly had some managerial responsibilities.

Table IV.1 gives the percentage of the working population in Quebec by ethnic origin and the proportion that each ethnic group contributes to the class called managers. Management is defined in two senses: the first is the Dominion Bureau of Statistics' managerial category, and the second includes all those in the professional class, except craftsmen and salesmen, who earn \$10,000 or more per year.

Table IV.1

Managerial achievement ratios in Quebec for those earning \$10,000 and over per year

	Working population by origin	Managers (D.B.S. classification)		Professionals except craftsmen & salesmen	
	%	%	Achievement ratio	%	Achievement ratio
French	75.4	44.3	.59	48.7	.65
British Isles	12.8	33.0	2.58	32.1	2.51
Other	11.8	22.7	1.92	19.2	1.63

In each case an "achievement ratio" has been calculated, which is simply the proportion of each ethnic group in a particular managerial category (for example, the proportion of French Canadians in the managerial group earning \$10,000 per year and over) divided by the proportion of that ethnic group in the total population. The achievement ratio is therefore a measure of under- or over-representation in management of an ethnic group and provides us, in a sense, with a measure of the relative chance that an average member of an ethnic group has of achieving management status. All things being equal, the normal achievement ratio would be one.

Table IV.1 seems to indicate that the odds for obtaining positions in management are weighted heavily against the French Canadians.



There are fewer than two-thirds of the number of French Canadians in management that one would expect if the selection were made from a random sample of the total population. In Chapter II we examined on an *a priori* basis the possibility of the existence of widespread ethnic prejudice which might explain the below-average economic achievement of the French Canadians. We considered that such an hypothesis would not stand up under scrutiny when applied to the labour force.

In Chapter III we took advantage of a survey of professionals in the labour force to see empirically if ethnic prejudice was an important factor. The survey results indicated that French- and English-speaking, non-management professionals with the same education tended to earn about the same income.

One should not dismiss, on *a priori* grounds, the possibility that ethnic prejudice might play an important part in the selection of managers. A company president might be quite broad-minded about letting anyone use the facilities in his plant, and yet might be quite narrow-minded about issuing keys to the executive washroom to persons who did not wear the old school tie. The census data would seem to indicate, at first glance at least, that workers and managers may be selected according to different rules.

In order to test this hypothesis further, one might reason that if prejudice is an important factor in selecting managers it would likely be felt most keenly by those French Canadians living outside the French Canadian environment of their own province. For French Canadians outside Quebec, therefore, one would expect achievement ratios to be lower. In spite of the fact that the level of education of French Canadians outside Quebec is just a bit lower than of those inside the province, it was decided that the test was worth making, and so the calculations of the previous table were repeated except that this time the analysis was applied to all of Canada *except* Quebec. The results are shown in Table IV.2.

Table IV.2  
Managerial achievement ratios in Canada, excluding Quebec, for those earning \$10,000 per year and over

	Working population by origin	Managers (D.B.S. classification)	Professionals except craftsmen & salesmen		
	%	%	Achievement ratio	%	Achievement ratio
French	5.1	3.8	.74	3.9	.76
British Isles	69.6	68.8	.99	66.9	.96
Other	25.3	27.4	1.08	29.2	1.15

It is frankly surprising to find that instead of having lower management achievement ratios, the French Canadians outside Quebec score higher despite having slightly less formal education. It should be remembered that the French Canadians analysed in this table identify themselves as French Canadian. We have to assume, of course, that a very high proportion of them speak English, but in their own view at least they are not anglicized. The improvement in the achievement ratio of French Canadians outside Quebec (who presumably speak English) gives at least a hint of the importance of the English language in the management of business.

Incidentally, while Table IV.2 suggests the importance of knowing English, it also makes it quite clear that the advantage of actually being English is grossly overrated. If there is any choice in the matter, the French Canadians wanting to get ahead would significantly improve their chances of achieving positions in management outside Quebec if they became "other-ized" rather than anglicized. The English in fact seem to have rather a hard time holding their own against competition from "other" groups and perhaps some of us would best serve the interests of our children by changing our designations to names like Smithousky or Armstrongovitch.

The problem with the achievement ratios calculated in the previous tables is that they imply that managers should be selected at random from the population regardless of age or education. Yet managers are not selected in this way. It is perfectly obvious that, Horatio Alger stories notwithstanding, the college graduate has a very much better chance of becoming a company president than has the high school drop-out. There are a number of studies in the United States showing educational and other characteristics of the managerial elite. The publications of Joslyn and Taussig<sup>1</sup> and Mabel Newcomer<sup>2</sup> are examples. From these pieces of research we know that the average educational level of executives is very high compared with the rest of the population, and it is, moreover, increasing steadily over time. Indeed, in the largest firms there are more executives with two degrees than there are with none, and the average number of university degrees per senior executive in the United States exceeds one.

In Canada we have put much less effort into education in general than the United States has, and only a fraction as much into business education. As a result, firms have simply not had the number and variety of better-educated people to choose from that similar firms in the United States have had. Still, the average level of education of managers in Canada is very much higher than that of the total population.

Information on the education of executives was obtained from a supplementary questionnaire sent to all the large companies of the main sample used in the study by Professor R. N. Morrison referred to previously,\* and in which the author of this study participated.

\*See page 23.

Table IV.3  
Educational distribution of executives occupying top positions, by highest level of education attained and by size of firm, in Canada

Highest level of education attained	Size of firm by number of employees							
	50 - 500 No.	%	500 - 1,000 No.	%	Over 1,000 No.	%	Total (over 50) weighted* No.	%
Less than primary	19	1.5	0	0	0	0	19	0.9
Primary	23	1.8	0	0	0	0	23	1.1
Less than high school graduation	76	6.1	3	2.6	4	1.2	83	4.2
High school graduation	485	38.6	36	31.6	45	14.0	566	31.2
Less than Bachelor	179	14.3	16	14.0	55	17.1	250	14.9
Bachelor	404	32.2	50	43.9	140	43.5	594	36.9
Post-Bachelor	70	5.6	9	7.9	78	24.2	157	10.8
(Total university)	(653)	(52.0)	(75)	(65.8)	(273)	(84.8)	(1,001)	(62.6)
Total all levels	1,256	100.0	114	100.0	322	100.0	1,692	100.0

\*Weighted according to the total number of employees employed in manufacturing in different sizes of establishments, grouped according to number of employees.

In addition, a mailed questionnaire was sent to smaller firms in Ontario and Quebec. The replies provided information on the education of nearly 1,700 executives. Of these, almost 1,400 were the top three executives in companies employing from 50 to 1,000 employees. The remaining 300 were the top executives of the large companies. The latter were asked for information on the top 10 people in the company, but the replies did not always relate to exactly that number. Table IV.3 shows the distribution of 1,692 executives by size of firm and by highest level of education attained. All these firms operate in Quebec, but some have head offices located elsewhere in Canada.

The table must be considered in relation to the educational achievement of the labour force in the age group from 45 to 65. In Quebec the percentage distribution of education in this age group at the time of the 1961 census was as follows:

Primary and less than primary	62
Less than high school	27
Completed high school	6
University: less than Bachelor	2
University: Bachelor's degree or higher	3

By comparing the education of the top executives in Table IV.3 with the education of the total population of Quebec, one can readily see that the small majority of the population going to university must supply a very large proportion of the executive talent. To be more specific: in the largest companies *none* of the top 322 executives had only primary, or less than primary, education. Yet if executives were chosen by a random sample from the population, we would expect to find 62 per cent of them in this category. When we combine this educational category with high school drop-outs, we can see that 89 per cent of the population supplies only 1.2 per cent of the top executives in the large companies. Or, to put the matter the other way around, from the ranks of the 5 per cent of the Quebec population between 45 and 65 with some university education come 85 per cent of the executives in the big companies.

The very apparent and close relationship between executive achievement and education will obviously be reflected in the ethnic origin of the managerial group unless all ethnic groups have the same quantity, quality, and mix of education. We know, of course, that the average number of years of schooling is different for French- and English-speaking Canadians, and it was decided to measure what impact this fact alone was likely to have on the ethnicity of managers.

In order to do this it was necessary to compute the number of French-speaking and English-speaking managers that would be found in Quebec if managers were chosen at random from the Quebec population, both French and English, but still chosen in such a way among educational levels as to produce the existing distribution of years of education of today's managers. In short, the predictive process had to give full weight to years of schooling but ignore ethnicity. By comparing the actual number of French- and English-speaking managers

Table IV.4  
Expected distribution of managers in Quebec by ethnicity based on random selection assuming the same educational distribution as shown for the executives of firms employing more than 50 employees

Educational level	Ethnic group	Number in 45-65 age group ('61 census)	Sub-weight	Weight of educational level	Expected number of executives in ethnic group per 100 executives		
					Fr.	Eng.	Other Total
Primary and less than primary	French	434,638	83.0		1.6		
	English	40,763	7.8			0.2	
	Other	48,086	9.2				0.2
	Total	523,487	100.0	2.0			2.0
Less than high school	French	155,174	70.4		3.0		
	English	50,400	22.8			1.0	
	Other	14,999	6.8				0.3
	Total	220,573	100.0	4.2			4.2
Completed high school	French	34,062	69.2		21.6		
	English	11,899	24.2			7.6	
	Other	3,292	6.7				2.1
	Total	49,253	100.0	31.2			31.2
University: less than Bachelor's degree	French	10,733	51.8		7.7		
	English	6,613	31.9			4.7	
	Other	3,412	16.4				2.4
	Total	20,758	100.0	14.9			14.9
University: Bachelor's degree or higher	French	14,587	54.4		25.9		
	English	7,472	27.9			13.3	
	Other	4,741	17.7				8.4
	Total	26,800	100.0	47.7			47.7
Expected ethnic distribution of managers					59.8	26.8	13.4 100.0



with the predicted number, we would have "corrected" for years of education; consequently the failure of an ethnic group to achieve the "right" or expected number of managers would then have to be attributed to the *kind* of education received (which we shall come to shortly) or to non-educational factors such as language, culture, prejudice, and so on.

In order to undertake this analysis, it was assumed that the distribution of the educational levels of the 1,692 executives in the sample could be applied to all executives. However, because the sample was subdivided by size of establishment, and because the educational characteristics of managers vary with the size of firm, it was necessary to estimate the relative importance of each of the size categories in the total population. To solve this problem, it was assumed that executives were divided among different-sized firms in the same ratio as the total labour force. The Dominion Bureau of Statistics' estimate of the manufacturing labour force in firms employing 50 to 500, 500 to 1,000, and over 1,000, therefore, provided the weights which were applied to Table IV.4 to estimate the educational distribution of 100 managers drawn at random from the population of Quebec.

There are, of course, a number of shortcomings in this approach. For one thing, there are probably more executives per thousand of the labour force in large than in small firms and since the educational requirement for executives in large firms is considerably higher than for those in small firms, the education of the average executive has probably been understated. However, because of time limitations, this estimate was the best that could be made. The next step was to apply this distribution of the educational characteristics of managers to the 1961 census estimate of the labour force broken down by education and ethnicity.

The calculations in Table IV.4 give the number of executives in Quebec that might be expected from the three main groups, if the executives were chosen at random from each ethnic and educational category of the census. We see, for example, that on the basis of the data presented, French Canadians should make up about 59.8 per cent of the managerial work force of the province. This table, then, permits us to compare the *expected* percentage with the *actual* percentage that each group did, in fact, contribute to the managerial class. By dividing the actual percentage figure by that expected, we are able to determine new and rather more refined achievement ratios. These ratios are set out in Table IV.5.

If we compare the achievement ratios in Table IV.5 with the cruder achievement ratios given in Table IV.1, we can see how much of the apparent advantage of the English Canadians and the apparent disadvantage of the French Canadians disappears when allowance is made for years of formal education. The English Canadians in managerial positions of \$10,000 and over, as defined by the Dominion Bureau of Statistics, who seem to have an achievement ratio 158 per cent greater



Table IV.5

Refined managerial achievement ratios in Quebec for those earning \$10,000 and over per year

Ethnicity	Expected contribution of ethnic group to management	Managers (D.B.S. classification)		Professionals except craftsmen & salesmen	
		Actual %	Achieve- ment ratio	Actual %	Achieve- ment ratio
French	59.8	44.3	.74	48.7	.81
English	26.8	33.0	1.23	32.1	1.20
Other	13.4	22.7	1.69	19.2	1.43

than that expected on the basis of a random selection from the total population, have this advantage cut to 23 per cent for this particular category. The French Canadians, instead of a 41 per cent disadvantage (Table IV.1) have, on the basis of Table IV.5, a 26 per cent disadvantage.

The most serious problem, however, is that this analysis ignores the kind of education or the educational mix, that is, it assumes that graduates of all university courses have an equal chance of obtaining an executive position. It is, of course, perfectly obvious that all university graduates do not have an equal chance of becoming company executives, if for no other reason than that some programmes of education are followed only after a student has decided not to work in business. Hence, one expects that the student studying theology, medicine or agriculture would not normally seek a job in industry after his graduation.

Moreover, on both *a priori* and empirical grounds, it is apparent that some kinds of education are more likely than others to lead to promotion in the business world. It can hardly be denied that the management of machines and people poses a broad array of physical, engineering, behavioural and organizational problems. These problems are complex but can be studied, and useful generalizations, theories and models can be formulated and tested. A body of knowledge can thus be developed and transmitted to others not having this knowledge. It would indeed be astonishing if people who received education in these areas did not have a head start on those who did not.

Of course, there are self-taught managers—and good ones—just as there are self-taught economists and historians, and just as there would be self-taught doctors and lawyers, if the law allowed it. In the past, management, like medicine before it, was mostly art with a small leavening of science. In time, however, the scientific method

has become more and more important and the amount of management theory that is clearly teachable has increased with the years. In this regard, management is following no different a course than most of the other professional and social sciences.

While American career studies and common sense would both indicate the importance of preparing students to meet the physical, human and organizational aspects of management, we in Canada have been very slow to accept this fact. Indeed, one of the critics of this study's first draft wrote, "The value of a business degree, especially at the undergraduate level, as compared with other degrees in preparing someone for management, is still to be proven." This is not an atypical reaction on the part of many academics and, indeed, of some businessmen. This feeling is strongly enough entrenched in Canada that the provision of business education facilities in many Canadian universities is a fairly recent event.

In order to test the relative importance of various kinds of education to managerial achievement it was decided to go back to the large companies in our study for further information on the educational backgrounds of their top ten executives. Usable data were thus obtained on 262 executives whose first language was other than French, and on the 44 who were French-speaking.

Table IV.6 gives the distribution of these executives among the different levels and kinds of education. It is striking that almost nine out of every ten English-speaking executives have at least some university education. Furthermore, the number with more than one degree exceeds the number with less than one degree. The percentage of French-speaking executives in our sample who have been to university is not so great and yet it still approaches two out of three.

It should be noted in passing, that the educational level of the French Canadian executive is significantly below that of his English-speaking colleague. If prejudice were an important factor in selecting managers one might expect the reverse. That is to say, if a French Canadian experienced difficulty in obtaining a top management position one might expect that he would have to be better educated than his English-speaking competitor in order to win a promotion. If this were so we should expect that the French-speaking managers who made it to the top would have better educational credentials than all others taken as a group. Such does not appear to be the case.

The second striking feature of the analysis is that two disciplines dominate all others as a source of top management. Among the 262 English-speaking managers 71 had engineering training and 79 had business training at the post-high school level—a total of 150 or 57 per cent of the top managers. Science follows a poor third, high school education only comes fourth, with law and arts splitting the remainder. If one considers engineering and business in relation only to executives who have some university training, it is seen that business and engineering faculties produce over 65 per cent of

Table IV.6

Distribution of 306 executives by language, level, and kind of education

Education	English-speaking executives		French-speaking executives	
	No.	%	No.	%
Less than high school	2	.8	4	9.1
High school	31	11.8	11	25.0
Less than Bachelor				
Business	30		7	
Other	8		0	
Total	38	14.5	7	15.9
Bachelor				
Engineering	55		1	
Business	19		3	
Science	21		0	
Arts, social science	3		0	
Arts, humanities	2		0	
Arts, unspecified	8		3	
Total	108	41.2	7	15.9
Post-Bachelor				
<i>Single discipline</i>				
Engineering	16		0	
Business	19		2	
Science	11		0	
Law	15		6	
Arts	2		3	
Unspecified and other	3		1	
<i>Dual discipline</i>				
Business and other	11		2	
Other combinations	6		1	
Total	83	31.7	15	34.1
Grand total	262	100.0	44	100.0

the top managers. If science is included, close to 80 per cent of the top English-speaking university-trained managers are accounted for.

From this it appears that it is not the size of the university-trained population that matters. What is really important is the percentage of the population that has university training in engineering, management, and science.

Today, improved communications and better data are intensifying the social and economic pressures which are tending to produce a certain degree of homogeneity in our universities. It is therefore easy to forget just how different these institutions were in the years when today's senior executives were receiving their education.

Back in 1929 the University of Montreal and Laval University, the two major French-language universities in Quebec, awarded 17 Bachelor and *licence* degrees in commerce, while awarding 327 arts degrees (which presumably did not include the arts degrees granted by affiliated colleges).<sup>3</sup> This represents just over one commerce for every 20 arts degrees. The ratio at McGill was one to four (25 to 104), and at Alberta the score stood at 9 to 23.

As far as engineering and science were concerned, these two fields accounted for only 46 out of 896 degrees awarded by the two French-speaking universities. At McGill, on the other hand, out of only 391 degrees awarded 118 were in engineering and science.

To summarize: in 1929 at McGill one out of every three graduates emerged from the fields from which most managers are drawn: engineering, business, and science. From the two major French-language universities, on the other hand, only one student out of every 13 graduated in the three top manager-producing faculties. To put the matter a little differently, McGill, which was considerably smaller than either of its two sister French-language universities, produced about two and one-half times as many graduates with a high managerial potential as did the other two universities combined. Had this situation persisted over the years and had it applied equally to all French-language and other universities from which the present managers in Quebec have been drawn, we would expect something like 30 per cent of today's university-trained managers to be French-speaking (or at least to be from French-language universities) and 70 per cent of the managers to be English-speaking or "other." The actual percentages according to D.B.S. for managers earning over \$10,000 in 1961 (Table IV.1) were 44 and 56 per cent respectively.

Of course, conditions in the universities did change and graduates moved in and out of the province. It would have been helpful to draw up a complete description of the present Quebec population by level and kind of education, broken down by ethnicity. Our analysis has shown the contribution which each educational group has made to the existing management. By assuming a random selection (in so far as ethnicity is concerned) of this number of managers from within each group we could calculate or "predict" the number of managers that there would be in Quebec from each ethnic group.

For example, suppose that the educational group, made up for all those who have postgraduate business education either as a continuation of an undergraduate business degree or as a second degree on top of a technical or scientific degree, contributed 12 out of every 100 managers in Quebec. If our educational inventory told us that there were 600 people in this educational group, 200 of whom were



French-speaking and 400 were English-speaking, then we would expect that with a random selection the 12 representatives of the group would be made up of four French-speaking and eight English-speaking Canadians. By undertaking this analysis for each educational group we would know just how many French-speaking Canadians there should be per 100 managers. By comparing the expected or predicted number of French-speaking Canadians in management with the actual number we would have an indication of the importance of non-educational factors in the selection of managers.

Suppose that the random process of selecting managers just described predicted that 49 out of every 100 managers earning over \$10,000 should be French Canadian, while in fact only 44 belonged to this group, we would then know that for every 100 managers in Quebec there were five French Canadians who had failed to achieve managerial status for non-educational reasons. These five would have to blame language disadvantage or cultural difference or ethnic prejudice or something else for their failure to become managers.

Had it been possible to perform the analysis described above, we would have been able to see how many French- and English-speaking engineers became managers, and the percentage of each ethnic group which did and the relative incomes they earned would provide exactly the comparison necessary to assess the total importance of all non-educational factors in the selection of managers.

### *C. Managerial Achievement of Architects, Scientists, and Engineers*

As before, it has been assumed that the graduates of the University of Montreal (l'École polytechnique), Sherbrooke, Laval, and l'École des beaux arts are so overwhelmingly French Canadian that the graduates of these universities are representative of the French-speaking sector of Quebec. For purposes of this analysis, then, these graduates again comprise the French Canadian sample. Graduates of all other universities are lumped together to represent the non-French population.

Each respondent was asked, among other things, to designate the function he performed, and one of the categories he could select was management. The replies, therefore, enabled us to determine for French Canadians and others the number and percentage of each discipline and each graduating class (for example, electrical engineers graduating from 1950 to 1954) who were in management. We were also able to determine the average salary of each management group.

#### *1. Architects*

Figure IV.1 shows the percentage in management and the salaries of French Canadian and other architects. There are only 29 French Canadian, and 48 other architects in our sample who consider themselves to be performing management functions. The graphs, therefore, show

considerable variation which is probably not too meaningful. The 15 postwar graduates are at an income advantage, while the 14 wartime and prewar graduates are at a disadvantage. As for the percentage in management, the French Canadians are at a disadvantage, though this may be a function of the average size of the architectural firms owned by French Canadians and others. On balance the very considerable income advantage which the professional French Canadian architect has does not show up among those architects who have called themselves managers, except in the younger group.

The head of a firm of architects who was asked to comment on this section stated that the most likely explanation of why the older French Canadian architects were doing less well than either their English-speaking contemporaries or their younger French Canadian colleagues was owing to changes in the Quebec government. He reasoned that many older French Canadian architects in senior positions would be closely associated with a former government and that when a new government came to power these senior people would have lost their preferred positions.

## 2. Scientists

In the analysis of professional achievement we found that the average French Canadian scientist in Quebec who was in neither management nor education was at a marked disadvantage, though most of the explanation was apparently to be found in the nature of the "other courses" taken at university.\* In Figures IV.2 and IV.3 we can see that the disadvantage also applies to scientists in management. In the first chart we see that French Canadians in management who graduated after 1950 are about on a par with other scientists. Those who graduated before 1950 have, as before, a considerable income disadvantage. The graph of managers with an "other science" background (Figure IV.3) shows again that most of the disadvantage is felt by French Canadians with "other courses."

In our sample there are only 15 French Canadian scientists with Master's degrees and a like number with Ph.D.'s who are in management. Both of these groups are at an income disadvantage. Here the experience of Master's graduates in management is similar to what we found for those doing professional work and once again the explanation may lie with the level, and perhaps the translation, of the term *licence*. But whereas those French Canadian professional scientists who went on to a Ph.D. closed, or nearly closed, the income gap between themselves and other Canadians with Ph.D.'s (Table III.4), the same is not true of those who are in management.

## 3. Engineers

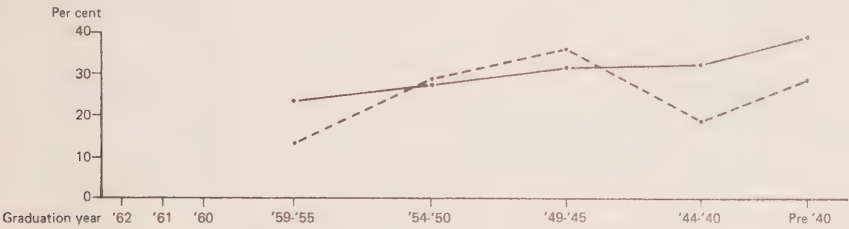
The professionals who are of particular interest to us are the engineers since they represent a group much more homogeneous in the kind and quality of education than any other for whom we have information. The several provincial associations or corporations of

\*See section on "Science Graduates," Chapter III, 27-33.

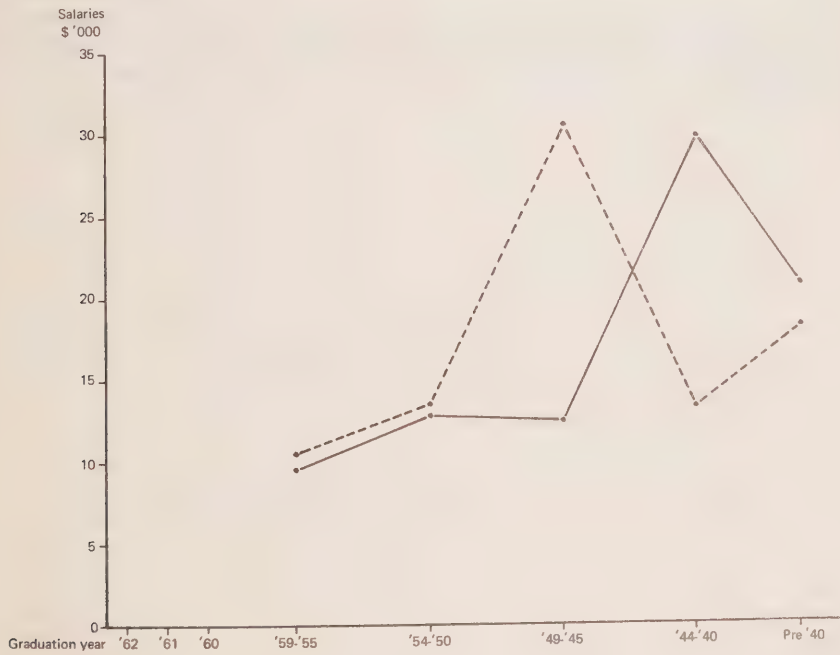


Figure IV.1  
Management achievement of university graduates in Quebec, Bachelor level: Architecture

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities ----, and other universities \_\_\_\_\_



Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities ----, and other universities \_\_\_\_\_

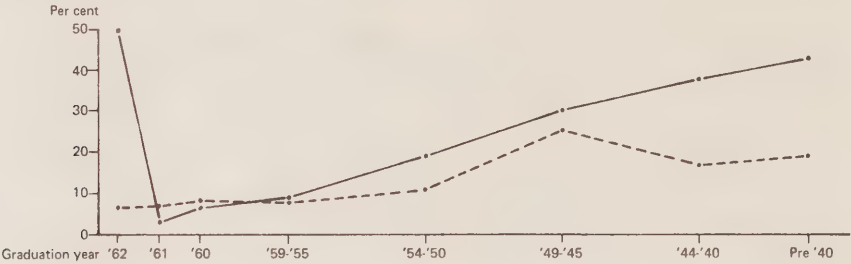


Number in management:								
French	0	0	0	4	7	4	2	12
Other	0	0	1	9	12	6	1	19
Per cent in management:								
French	0	0	0	13	29	36	18	29
Other	0	0	50	24	28	32	33	40
Salary (\$):								
French	0	0	0	10,500	13,714	30,625	13,500	18,541
Other	0	0	8,500	9,811	13,208	12,833	30,000	21,263

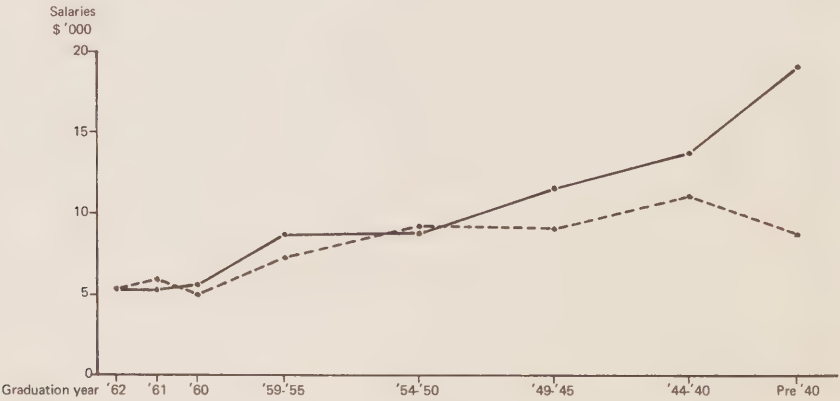
Figure IV.2

Management achievement of university graduates in Quebec, Bachelor level: All science

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities ----, and other universities \_\_\_\_\_



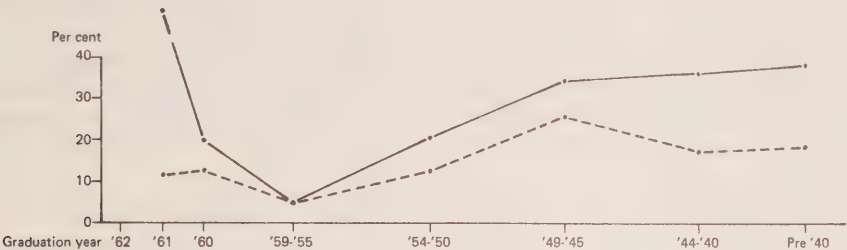
Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities ----, and other universities \_\_\_\_\_



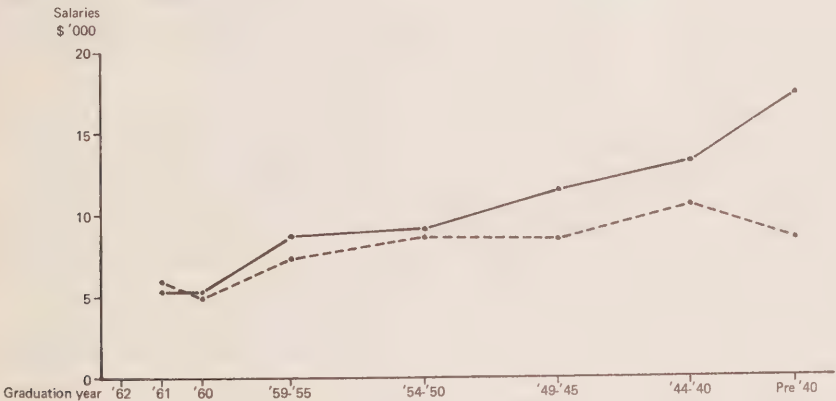
Number in management:								
French	1	2	3	16	17	33	17	53
Other	1	1	5	24	61	72	45	86
Per cent in management:								
French	7	8	9	8	11	25	17	19
Other	50	3	7	9	19	30	38	43
Salary (\$):								
French	5,500	6,000	5,166	7,250	9,235	9,045	11,205	8,867
Other	5,500	5,500	5,700	8,750	9,040	11,701	13,844	19,058

Figure IV.3  
Management achievement of university graduates in Quebec, Bachelor level: "Other courses" in science

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities ----, and other universities \_\_\_\_\_



Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities ----, and other universities \_\_\_\_\_



Number								
in management:								
French	0	2	3	7	14	23	15	47
Other	0	1	2	3	25	34	16	26
Per cent in								
management:								
French	0	12	13	5	13	26	18	19
Other	0	100	20	5	21	35	37	39
Salary (\$):								
French	0	6,000	5,166	7,357	8,571	8,456	10,766	8,553
Other	0	5,500	5,500	8,833	8,960	11,852	13,531	17,673

engineers throughout Canada (and indeed throughout the United States as well) impose roughly the same standards of admission on all applicants, with the result that a comparison of the management achievement of the French and other ethnic groups should be much more meaningful than a comparison of, say, scientists, and as we know engineers are one of the two major sources of executive talent.

Figures IV.4 to IV.7 show in turn the percentage in management and the average salaries of all engineers and of three main categories ("main" at least from the point of view of the number in our sample): civil, chemical and electrical engineers. These charts reveal the striking fact that the French Canadians are at a significant advantage in obtaining management positions, but those who are in management do not receive as much money as other engineers who reach managerial positions.

The most important chart from the point of view of educational homogeneity and numbers in our sample is Figure IV.5, which shows the managerial achievement of civil engineers. It appears that the French Canadian civil engineer has about five more chances per 100 of obtaining a position in management than any other Canadian, but that the greater number who "win" managerial jobs receive a salary which, on the one hand, is higher than the engineers (French Canadian or other) who are not promoted into the ranks of management but which, on the other hand, is lower than that received by other engineer managers. The income disadvantage of the French Canadian manager ranges from zero to 10 per cent, depending on his age.

As it happens, the total number of management dollars paid to 100 French Canadian civil engineers chosen at random from all French Canadian civil engineers in the province is about the same as the management dollars paid to 100 other civil engineers; the distribution, however, is somewhat different. With the French Canadian group, the management dollars are spread over a larger number of individuals.

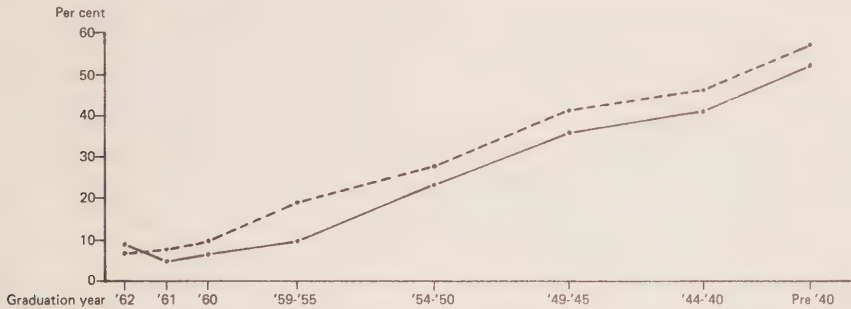
The most obvious explanation of this rather peculiar pattern of managerial achievement of engineers is that they are at once beneficiaries and victims of a "bilingual belt"—the zone in the hierarchy of a company which unites unilingual French and unilingual English workers, managers, customers, suppliers and the like.

It is quite logical to assume that the average French Canadian who graduates from university is able at least to get along in English. Moreover, such a graduate is particularly valuable to an English-language company in Quebec in the bilingual belt where work may be performed and commands given in French, but information passed up and commands received in English. In such a situation it is likely that a command of French is much more important than a command of English.

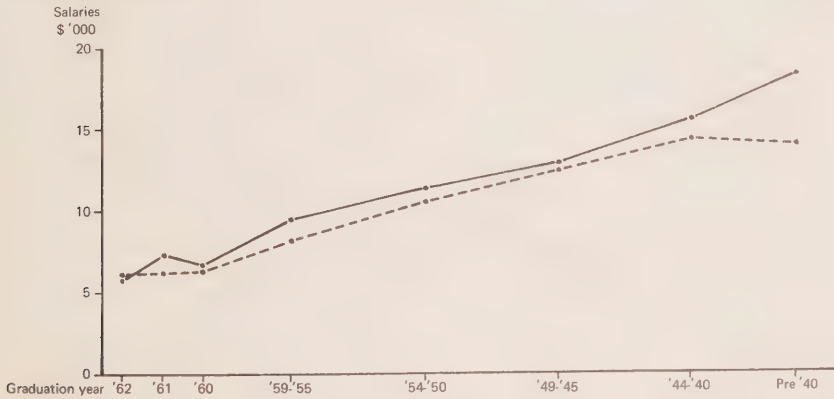
It would seem surprising *a priori* if the relative command of French and English did not become an important factor in deciding who should be promoted out of this bilingual belt into a higher level of management where English is almost exclusively the working language. One

Figure IV.4  
Management achievement of university graduates in Quebec, Bachelor level: Engineering (all branches)

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities ----, and other universities ———



Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities ----, and other universities ———

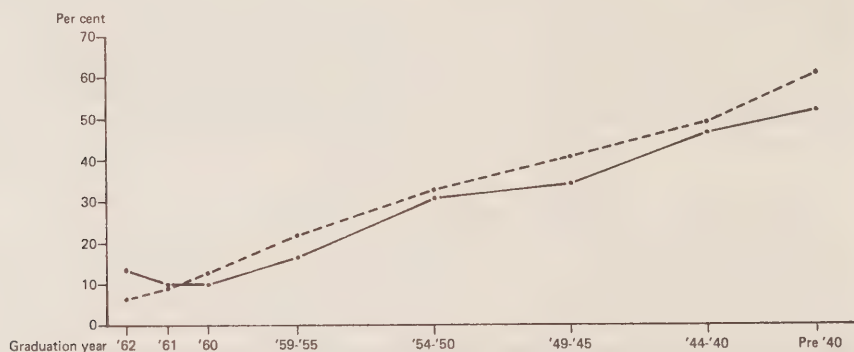


Number								
in management:								
French	3	11	17	124	110	103	68	138
Other	4	7	14	97	284	314	207	557
Per cent in management:								
French	7	8	10	19	28	42	47	58
Other	9	5	7	10	24	37	42	53
Salary (\$):								
French	6,166	6,227	6,323	8,274	10,650	12,645	14,470	14,173
Other	6,000	7,357	6,571	9,592	11,463	13,028	15,809	18,588

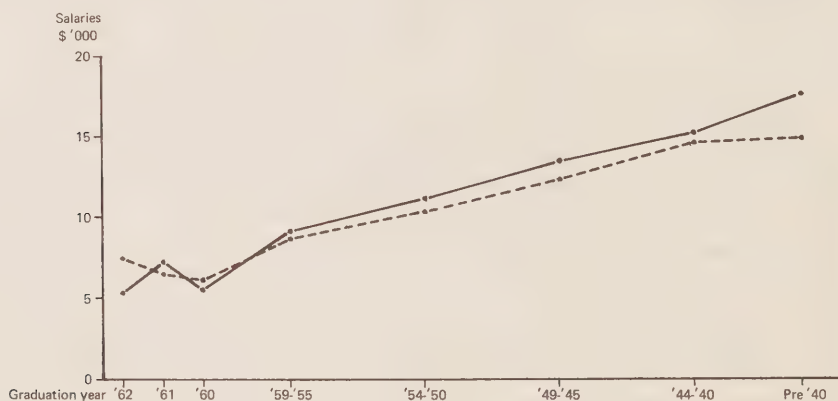
Figure IV.5

Management achievement of university graduates in Quebec, Bachelor level: Civil engineering

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities ----, and other universities ———



Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities ----, and other universities ———

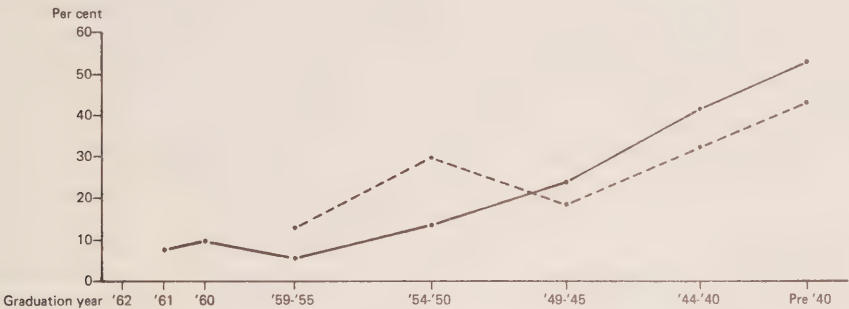


Number								
in management:								
French	1	5	9	60	53	33	41	110
Other	1	3	4	33	79	57	37	105
Per cent in								
management:								
French	7	9	13	22	33	41	49	61
Other	14	10	10	17	31	34	47	52
Salary (\$):								
French	7,500	6,500	6,388	8,650	10,301	12,318	14,670	14,700
Other	5,500	7,166	5,750	8,833	11,056	13,438	15,216	17,795

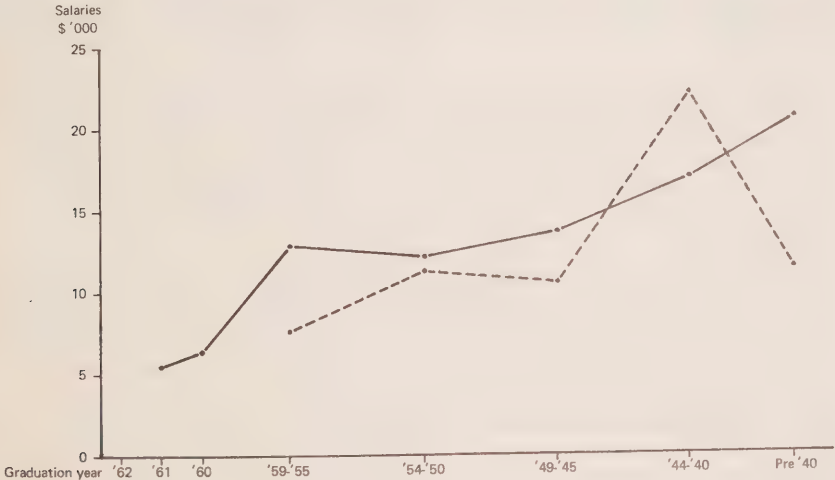


Figure IV.6  
Management achievement of university graduates in Quebec, Bachelor level: Chemical engineering

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities -----, and other universities \_\_\_\_\_



Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities -----, and other universities \_\_\_\_\_

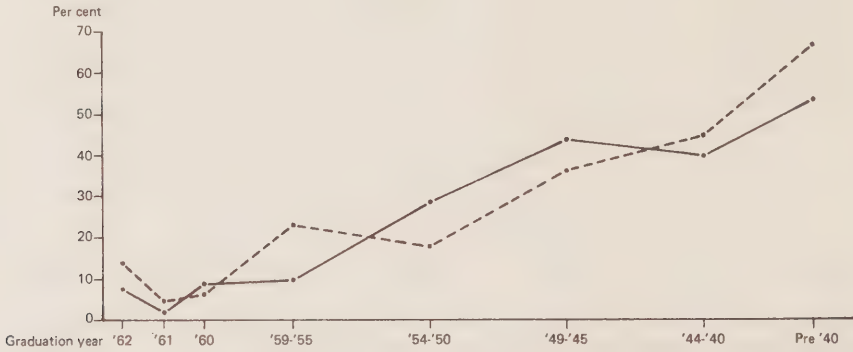


Number								
in management:								
French	0	0	0	6	9	4	2	4
Other	0	1	2	7	21	28	43	78
Per cent in management:								
French	0	0	0	13	30	19	33	44
Other	0	8	10	6	14	24	42	54
Salary (\$):								
French	0	0	0	7,666	11,444	10,750	24,750	11,750
Other	0	5,500	6,500	12,857	12,166	13,803	17,104	20,884

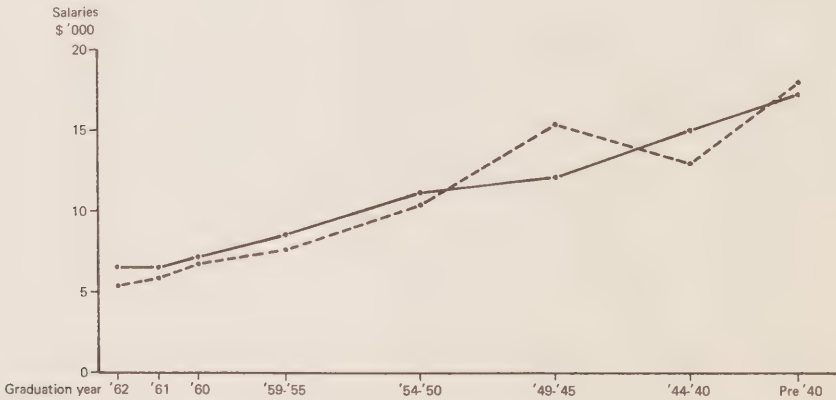
Figure IV.7

Management achievement of university graduates in Quebec, Bachelor level: Electrical engineering

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities ----, and other universities ———



Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities ----, and other universities ———



Number in management:								
French	2	2	2	17	10	16	5	4
Other	1	1	5	24	84	95	36	169
Per cent in management:								
French	14	5	7	23	18	36	45	67
Other	8	2	9	10	29	44	40	54
Salary (\$):								
French	5,500	6,000	7,000	7,676	10,400	15,343	12,900	17,875
Other	6,500	6,500	7,300	8,625	11,285	12,168	14,916	17,402

can easily imagine a French Canadian and an English Canadian candidate being considered for promotion, each of whom could "get along" in the other's language and who in all other respects were equal. The only difference we have assumed is that one can work effectively in French and can get along in English while the other can work efficiently in English and less so in French. If French is the most important language for working and explaining in the bilingual belt, the French Canadian would, we assume, enjoy a special advantage at that particular level and the English Canadian, a disadvantage; but at the next level of management in the company, these advantages would easily be reversed. In such a situation the senior executive who must decide on the promotion might very well feel that the French Canadian is making his greatest contribution to the company where he is, and that the English Canadian would be more efficient at the higher level.

Our data seem to support, though not prove, the hypothesis that something like this does tend to happen. But compared with the overall importance of education, the effect of the bilingual belt is slight. As a professional the French Canadian under 50 does not seem to be at a net disadvantage, and as a manager, comparing like with like, the disadvantage, if *all* the income differences could be attributed to this one factor, appears to be zero to the age of about 35 and perhaps 3 to 4 per cent from 35 to 50. Even this disadvantage is in part offset by the greater number of French Canadians who are able to obtain managerial jobs.

Above the age of 50 (or for graduates before 1940) the bilingual belt problem—plus all the other factors like quality of education, and so on, which work to the disadvantage of French Canadians—seems to put the French Canadian at an income disadvantage of about 10 per cent, though he still retains an advantage in obtaining a managerial job.

The second hypothesis that might explain both the slightly higher proportion of French Canadians in management and their somewhat lower salaries relates to the fact that the average French Canadian works in a somewhat smaller firm. We know that the French Canadian firms in Quebec are smaller than firms owned by non-French Canadians.\* Since they employ French Canadians almost exclusively, it follows, therefore, that the average French Canadian engineer works in a smaller firm than does the engineer from other ethnic groups. Because the small firm tends to be less highly specialized than its larger competitor, there is greater scope for any one member of the firm to participate in at least some management functions. This is simply to say that in a two-man drafting section, one man is likely to be the chief draftsman and the other the assistant chief draftsman. Larger drafting departments are likely to have more "Indians" but

---

\*In exactly the same way, incidentally, that Alberta firms owned by Albertans are smaller than the firms owned nationally or internationally.

after adding a chief assistant to the assistant chief the possibility of adding still more chiefs diminishes. The result is that the smaller the department the higher the proportion of chiefs to Indians.

If a premium is placed on being a chief, or being in a particular environment (for example, one in which French is the working language), it is possible that French Canadians gravitate to positions in small firms where the reward consists, in part, in enjoying some management prerogatives and, in part, in not having to adjust to what might be considered a "foreign" environment or a different language.

Another interesting hypothesis that is consistent with the observed facts is that in almost all jobs performed by professionals there are elements of managerial functions. Indeed it is now a well-accepted proposition based on sound empirical research that the difference between a line and a staff job is at best a matter of degree. So-called staff people do make operating decisions and direct and co-ordinate the work of others, while line people often find themselves doing little more than tendering advice.

What this means, of course, is that it will not always be clear, even to oneself, whether one is in fact performing a managerial or a professional function. If one ethnic cultural group attaches somewhat greater value to being a manager, it would not be surprising if respondents of that ethnic group decided marginal cases in favour of the managerial, rather than the professional, label. Since managers are paid considerably more than professionals, all that would be necessary is to redefine some of the doubtful cases from managerial to professional in order to produce a lower percentage of French Canadians in management, and a higher average income of those remaining in the management category.

In the study made by Professors Auclair and Read<sup>4</sup> it was in fact established that status is significantly more important to a French-speaking than to an English-speaking Canadian. There is therefore a sound empirical basis for assuming that we can attribute all or part of the higher percentage of French Canadian engineers in management and their lower salaries to a slight and undoubtedly unconscious bias on the part of French Canadians to use the "managerial" rather than "professional" label in doubtful cases.

The final hypothesis that might explain the lower managerial incomes of French Canadians, especially in the older age groups, is simply that English becomes more important in both English- and French-owned firms as one mounts the managerial ladder. As has been pointed out earlier, the increasing importance of English as one moves up in the managerial hierarchy has been well documented by Professor R. N. Morrison, even for firms which are owned and operated by French Canadians.<sup>5</sup>

In Chapter III we observed that wherever one could identify a professional group that was likely to be more bilingual than average, the income improved. In order to see if this proposition would also

apply to managers we considered the experience of engineers at the Master's level in Quebec and of French-speaking engineer- and scientist-managers in Ontario. Figure IV.8 shows the managerial achievement of 26 French-speaking engineers compared with a larger number of English-speaking individuals who obtained management positions after having obtained a Master's degree in engineering. This group, which is probably more bilingual than engineers with Bachelor degrees, has done very well in obtaining management jobs, though its relative salary position is not so favourable as that of the French Canadians at the Bachelor's level. The interesting exception is eight (out of 16) pre-1940 graduates having management jobs at about the same rate of pay as their English-speaking colleagues. The anomaly we noted for engineers with Bachelor's degrees (a somewhat higher percentage in management with a correspondingly lower average salary) also holds for those with Master's degrees. The better knowledge of English which we have assumed this group has, appears to have paid off in more management jobs but not in relatively better pay.

Figure IV.9 describes the experience of 19 French Canadian engineers at the Bachelor's level who are performing managerial functions in Ontario. Figure IV.10 adds seven science graduates to the 19 engineers and shows the combined experience of both groups in Ontario. While the data are too thin to prove very much, this group, which is undoubtedly fluently bilingual, has been able to match the achievement of other Canadians in obtaining, and in being paid for, managerial jobs.

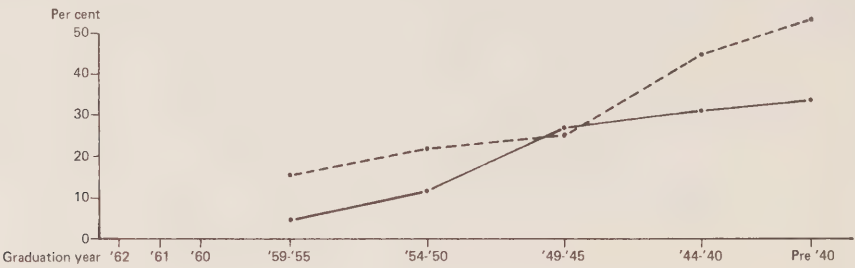
The last group of French Canadians we could assume to be almost completely bilingual were M.B.A.'s, since this degree was not offered in Quebec until very recently. Unfortunately, there are not enough cases on the French-speaking side to prove very much, but for what it is worth Figure IV.11 shows the incomes of the English- and French-speaking engineer-M.B.A.'s. The rather dramatic pay-off received by the six French Canadian individuals in our sample who elected this programme is worth noting.

This chart also enables us to offer fresh evidence concerning the appropriateness of different disciplines as a training for managers. Earlier in this chapter it was observed that engineering and business were far and away the major sources of executive talent. One might reason that if this is so the engineer-M.B.A.'s who have combined both fields should do very well indeed. In order to provide a basis of comparison we have included in Figure IV.11 the income experience of English-speaking (that is, "other") engineer-Ph.D.'s. Despite the fact that the Ph.D.'s have more years of formal education, the income achieved by the M.B.A.'s is strikingly greater.

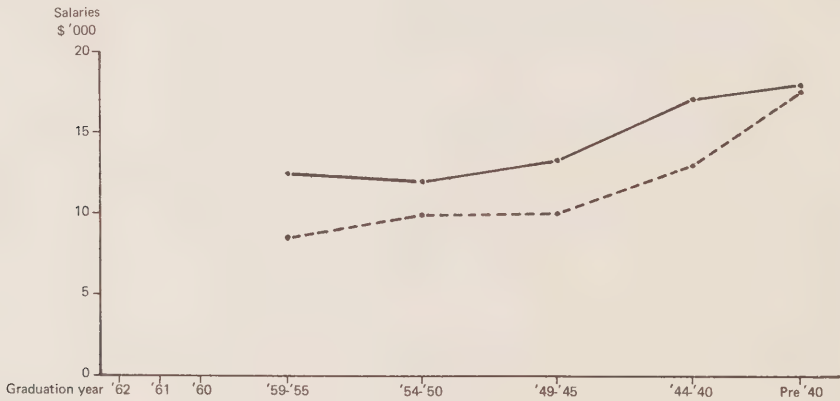


Figure IV.8  
Management achievement of university graduates in Quebec, Master's level: All engineering

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities ----, and other universities \_\_\_\_\_



Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities ----, and other universities \_\_\_\_\_

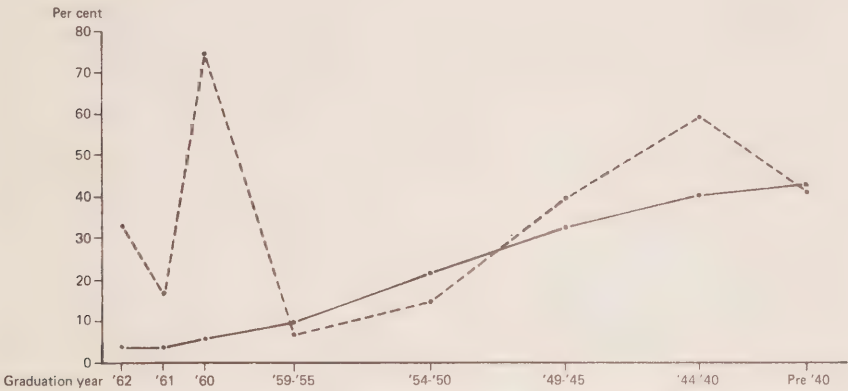


Number in management:								
French	0	0	0	6	5	2	5	8
Other	0	0	0	2	7	24	18	63
Per cent in management:								
French	0	0	0	16	22	25	45	50
Other	0	0	0	5	12	27	31	34
Salary (\$):								
French	0	0	0	8,666	9,900	10,000	13,000	17,562
Other	0	0	0	12,500	12,071	13,312	17,250	17,793

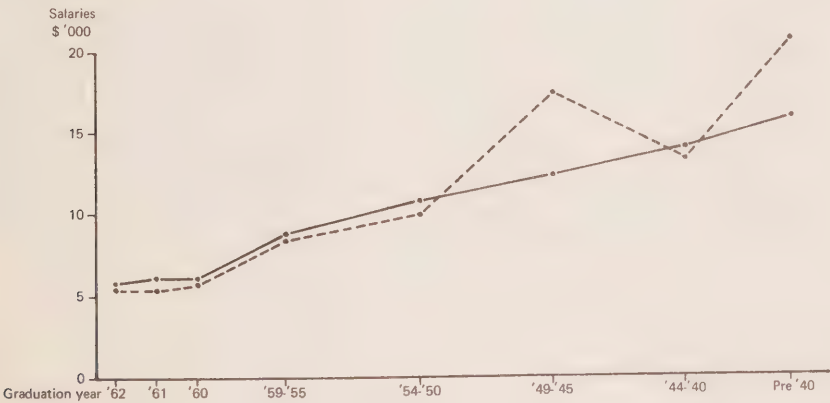


Figure IV.9  
Management achievement of French-language university graduates in Ontario, Bachelor level: All engineering

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities ----, and other universities ———



Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities ----, and other universities ———

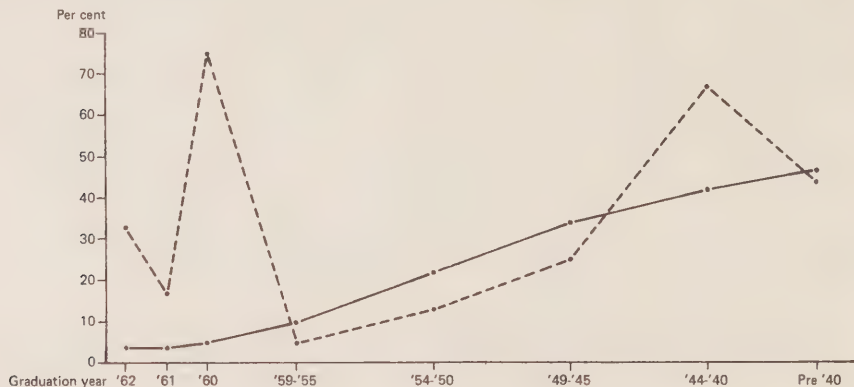


Number in management:								
French	4	1	3	1	2	2	2	4
Other	7	13	22	215	668	807	283	1,074
Per cent in management:								
French	33	17	75	5	13	25	67	44
Other	4	4	5	10	22	34	42	47
Salary (\$):								
French	5,500	5,500	5,833	8,500	10,000	17,500	13,500	20,875
Other	5,928	6,423	6,409	8,702	10,889	12,501	14,295	16,288

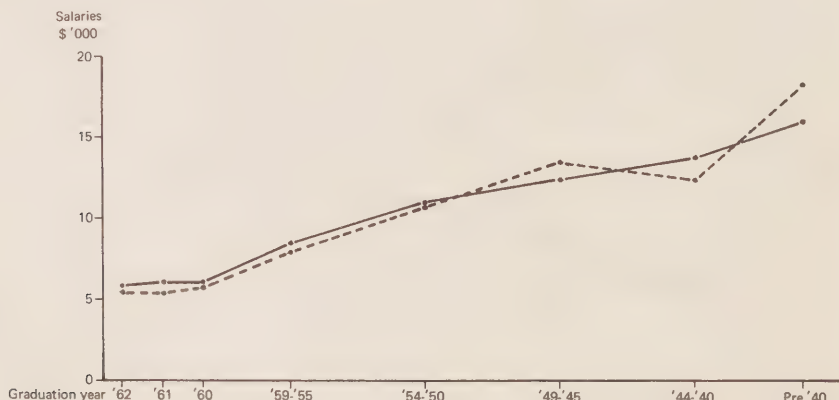
Figure IV.10

Management achievement of French-language university graduates in Ontario, Bachelor level: All engineering and science

Percentage of graduates (excluding those engaged in teaching) in management, from French-language universities ----, and other universities \_\_\_\_\_



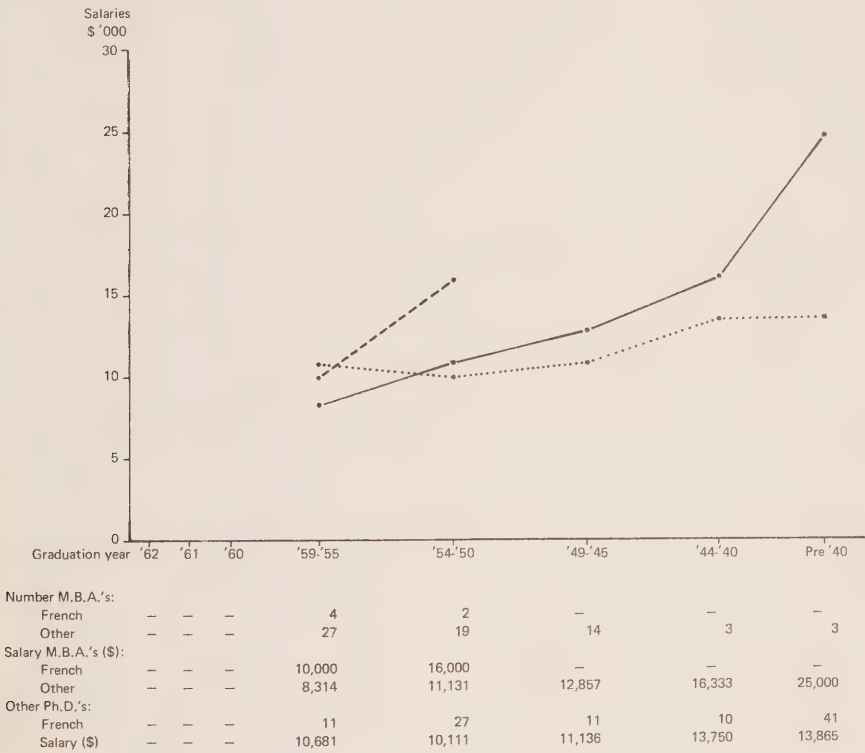
Average salaries of graduates (excluding those engaged in teaching) in management from French-language universities ----, and other universities \_\_\_\_\_



Number in management:								
French	4	1	3	2	4	4	3	5
Other	7	16	30	238	732	890	342	1,212
Per cent in management:								
French	33	17	75	7	15	40	60	42
Other	4	4	6	10	22	33	41	44
Salary (\$):								
French	5,500	5,500	5,833	8,000	10,750	13,500	12,166	18,200
Other	5,928	6,250	6,233	8,636	10,779	12,406	13,808	16,126

Figure IV.11  
Professional achievement of university graduates in Quebec, M.B.A.  
and Ph.D. levels: Engineering (all branches)

Average salaries of engineering graduates of French-language univer-  
sities with M.B.A.'s ----, of other universities with M.B.A.'s ———,  
and of other universities with Ph.D.'s .....





The income of the average French-speaking Canadian is not as high as the income of his English-speaking counterpart. The difference is large enough to be perceived and it has been suggested that this provides an important source of friction between the two major ethnic groups. Of perhaps greater importance is the fact that French-speaking Canadians appear to be under-represented in the management of corporations. This fact also leads to an understandable dissatisfaction on the part of French-speaking Canadians with their role in our society.

Given the below-average income and managerial achievement of French-speaking Canadians, it is not difficult to understand the political appeal of such slogans as "100 years of injustice," *maîtres chez nous*, "hewers of wood and drawers of water," "English economic imperialism," "exploitation," "second-class citizens," and so on.

It was the main purpose of this study to determine what substance there might be to the proposition that French-speaking Canadians were operating under some kind of economic handicap, and, if there is such a handicap, to understand and explain it so that it might be put right.

It was quickly discovered that measuring the economic achievement of two ethnic groups is not as easy as it might seem. A gross comparison of per capita income, for example, conceals more than it reveals. For example, a "correction" for age distribution is called for. Sixteen-year-olds can hardly claim that they are being exploited by sixty-year-olds just because the latter earn more money. Obviously a fair comparison requires us to take the age distribution of the different ethnic groups into account.

A fair comparison should also take into account cultural values. To cite an extreme case, a man who has taken a vow of poverty (or an ethnic group in which a higher proportion of its members has taken such a vow) should not expect the same income as a person who is

quite highly motivated to achieve economic ends. Or to introduce a different and more important variable, we know that income is very strongly related to education. Furthermore, we know that, rightly or wrongly, the operation of the competitive market places a higher monetary value on the services of an engineer than it does on the services of an arts graduate. It may, of course, be argued that the economic world is not as it should be and that the arts graduates are unfairly dealt with. It may even be argued that an ethnic group that chooses to place a higher percentage of its university students in arts programmes is being exploited—though what meaning "exploitation" could have if used in this way is not clear. Nor is it clear that any society would accept the logical solution to such an exploitation problem which would clearly involve a tax on engineers and a subsidy to the arts graduates of both ethnic groups.

Ideally a comparison of the economic and managerial achievements of two ethnic groups should make allowance for age, values, amount and kind of education, ability, and, of course, language. In this study we did not manage to achieve the ideal but the comparisons have probably come closer to comparing like with like, than any undertaken before the appointment of the Royal Commission on Bilingualism and Biculturalism. We have also been able to show that the nature and extent of the problem is quite different from what is commonly supposed.

In brief, it is suggested that this study challenges the belief that the French-speaking Canadian is, other things being equal, at a serious disadvantage compared to other Canadians. While the gross statistical evidence would seem to support the myth, our analysis has shown that the more carefully one refines the comparison and the closer one comes to comparing like with like, the better the French Canadian does vis-à-vis other ethnic groups.

The largest and most homogeneous group of French and other Canadians which was found was made up of engineers. Based primarily on the experience of this particular group, we may draw the following conclusions:

1. Taken together, the French Canadian managers and professional engineers under the age of 50 have an income advantage over all other groups.
2. When the managers in this group are considered separately, the French Canadians are at an advantage in obtaining management positions, but are at a disadvantage with regard to income ranging from zero for people who graduated in the last 10 years to 3.5 per cent for people who graduated 10 to 25 years ago.
3. French-speaking civil engineers over the age of 50, that is, those graduating before 1940, are at a 6 per cent income disadvantage taking managers and professional people together, whereas the managers in this group are at an income disadvantage of about 10 per cent. However, if we look at those who have gone on to do graduate work (most of which would be done in



English), the income disadvantage of this older group disappears both in the management and in the management plus professional groups taken together.

4. Considering all age groups together, 100 French Canadian civil engineers chosen at random would earn the same number of management dollars as 100 non-French Canadian civil engineers.
5. In accounting for achievement, ethnicity is not nearly so important as education. The average university graduate of any ethnic group in Canada will probably earn about the same pay as the average graduate of any other ethnic group with the same training.

In the months that passed between the first and second drafts of this report, the author had the opportunity to test these conclusions on a number of individuals. A minority accepted the evidence without surprise and indeed some (notably a number of successful French Canadians) questioned the assumption that there is a myth to the effect that French-speaking Canadians are at any disadvantage in the world of commerce. It must be said, however, that the majority of those who read the report had a very hard time accepting the evidence of this study. Is it possible, they asked, for the myth to be so far wide of the mark?

We owe it to these readers to explore this matter further. In the first place, it should be pointed out that measurement and science have only recently come to the social, managerial and political disciplines. Without measurement there can be no effective challenge to a myth. It is not obvious to a man who does not have access to the knowledge of the physical sciences that the earth turns on its axis rather than that the sun orbits around the earth. Without science who is to say that thunder is not the voice of a displeased god? The behavioural scientists tell us that much of our sensing of the environment is carried on to confirm our theories, our generalizations or our myths. "You can't generalize about people," "happy people are productive people," "spare the rod and spoil the child" are myths that do not happen to be true, but when challenged the non-behavioural scientist will be able to quote many cases to "prove" his point.

Myths die hard, especially when some people want to believe in them. It is easier for a professor to believe that he did not get a promotion because the dean is prejudiced against him owing to his religion than because he is not a very effective teacher. As a case in point, the bright young graduate student who was processing the educational records of the top three men in the small-company survey of this study, was most impressed by "the number of cases in which one found that the top man had a grade four education while the second and third men might be a Ph.D. in chemistry and an M.B.A." The processing of a much larger number of individual cases than most of us could possibly be aware of in our lifetime confirmed for this student the Horatio Alger myth. However, the computer had not heard of Horatio

Alger and when it printed out the appropriate table it showed that despite the fact that the top man was a little older and therefore came from an age group with a little less education he had in fact more, not less, education than his two junior colleagues.

While a scientist should owe no obligation to ancient myths, the author's uneasiness in challenging so flatly the myth that the French-speaking Canadian is at an unfair disadvantage in the world of business arises partly from the fact that he, for one, accepted the validity of the myth. Furthermore, fairness or prejudice apart, there seemed on *a priori* grounds a few non-educational reasons why the French-speaking Canadian might not do as well financially as his English-speaking colleague. After allowing for age and the quantity and kind of education, it was expected that a significant spread between the incomes of French- and English-speaking Canadians would be found. This difference, it was thought, would then be apportioned in some way among (a) cultural differences, (b) language differences, including the problem of the "bilingual belt," (c) inherited wealth and income, and finally of course (d) ethnic prejudice.

As far as cultural differences are concerned, the Auclair-Read study indicated that there are statistically significant differences in the culture of the French and English ethnic groups and that, moreover, these differences would probably work to the economic disadvantage of the French Canadian.<sup>1</sup> As pointed out earlier, we do not know how significant these differences really are, measured by economic performance, and, moreover, it may be that by selecting those French- and English-speaking Canadians who have gone into engineering we may have sub-cultures which are quite similar. In other words, the cultural difference between an arts graduate and an engineer in the same ethnic group may be greater than the cultural difference between two average engineers from different ethnic groups. Our sample has probably eliminated or at least minimized cultural differences.

The evidence does suggest that bilingualism is important, especially as one gets older. This is not surprising and indeed, as Professor Morrison's research indicates, the requirement that a senior French Canadian manager be bilingual cannot normally be escaped, even by joining a French Canadian owned firm.<sup>2</sup> Again, it might be assumed that the most recent engineering graduates from French-language universities are sufficiently bilingual for the needs of most junior positions in Quebec and Ontario. Our study, therefore, has not isolated the cost of being and remaining unilingual for a French-speaking Canadian who aspires to a managerial role.

One might have expected *a priori* some difference in income (of perhaps 1 or 2 per cent) to be attributed to the momentum of historical differences in income and wealth. If French-speaking Canadians have had lower incomes and positions in the past one would expect these differences to carry forward—though perhaps in a modified form—to this generation.

The fact that this does not seem to have happened in our sample may be explained by the fact that French-speaking engineers come mostly from families that have already become professionally or managerially oriented in outlook and income. As far as "position" is concerned, managerial posts in the modern, large corporation are not inherited, and in most companies proven ability carries much more weight than a well-placed parent.

An important part of the myth we are examining attributes the disadvantage of the French-speaking Canadian, in part at least, to the existence of an ethnic prejudice. It is the *apparent* denial of the existence of such prejudice to which some readers of this study took the most violent exception. This proposition also requires further consideration.

It is, of course, possible that significant ethnic prejudice does not exist, at least among groups of western European extraction; or if it exists to a statistically significant degree, the prejudice does not produce what might be called significant economic responses. It is quite possible that a person's responses on an attitudinal survey would label him as mildly anti-Semitic, and yet he might continue to patronize a supermarket he knows to be owned by Jews.

There are other possible explanations which would allow for the existence of widespread prejudice and which would still be consistent with the results obtained in this study. In the first place, it may be that prejudice exists but that it is directed towards a stereotype rather than to specific or known individuals. Hence, we may be told in all seriousness by someone that "I can't stand Americans, but of course I like them fine as individuals—why, some of my best friends. . . ." What this seems to say is that the speaker does not like his idea of an American but that his "idea" is not allowed to influence his opinion of individuals.

In the present context it is quite possible that a "waspy" manager might not in principle like French-speaking Canadians, or Catholics, or both, but that once he gets to know Pierre, Pierre is henceforth assessed as an individual rather than as a member of an ethnic or religious group.

Another hypothesis is that prejudice used to exist but that it is disappearing because of better communication and more education. After all, if one goes back 150 years the ethnic prejudice was serious enough that the English and French in North America were shooting at each other. An analysis of the history books rather than the current newspapers might indicate that ethnic prejudice is fading. This hypothesis is supported by the fact that older French-speaking engineers have not done as well as younger engineers. (However, it does not square so well with the fact that the older French-speaking engineers with Master's degrees have out-performed their English-speaking counterparts.)



Another possibility that must be considered is that while prejudice might be important it is held in check within most individuals. The fact that a man does not pursue every pretty girl he meets does not mean he is not prejudiced in their favour. It may be that he would rather censor any outward manifestation of his prejudice than have to explain it to his wife. Racial or ethnic prejudice is not something of which most of us would be proud, and even if it has been acquired in childhood along with a fear of spiders and of the dark, as we mature we try to control it, to compensate for it, and perhaps from time to time even to over-compensate.

Another possibility that should be given some weight is that prejudice exists among both French- and English-speaking Canadians with the result that in part at least it is self-cancelling. That is to say, as measured by economic results the disadvantage that French-speaking Canadians suffer at the hands of other Canadians is counter-balanced by the disadvantage that other Canadians suffer at the hands of French-speaking Canadians.

Perhaps the most interesting hypothesis that has been suggested runs somewhat as follows. Prejudice against the French Canadian did exist in business and as a result there were few jobs open to French-speaking Canadians. The French-language universities simply responded to the manifest needs of the French-language community and the only reason they produced arts graduates rather than commerce graduates and engineers is that arts graduates could be absorbed by the French-language community while engineering, science, and commerce graduates could not. The fact that the engineering graduates of these universities did not suffer simply attests to the fact that the universities were successful in keeping the supply restricted to meet a demand which was, in turn, restricted by prejudice. As someone who has had to fight very hard to have an English-language university respond to the educational needs of the business community, the author finds this picture of a university as being highly sensitive to the needs and wishes of the community, charitable to the point of inaccuracy.

First of all, there has been virtually no measurement of the relative economic achievement of different kinds of graduates and it is most unlikely that the universities (French or other) really knew much about the economic performance of their graduates or, more to the point, that they considered economic performance of their graduates to be very relevant to their mission. Furthermore, one would be interested in knowing why the French-language community needed or wanted a higher proportion of arts graduates than did the English-language community.

On the contrary, Canadian universities have been following at such a respectful distance behind their American counterparts, particularly in the pragmatic sciences, that it is difficult to see that they have spent too much time worrying about community needs. Sales forecasts and forward planning have not been among the managerial tools

of our universities, French or English. It is about as hard to attribute to prejudice the lag of French-language universities in the development of the pragmatic, management-producing disciplines as it is to argue that English-language universities only recently accepted post-graduate business education because up to now American companies have been prejudiced in their hiring of English-speaking Canadians. The element of truth in either proposition is slight.

The conclusion which follows from the foregoing analysis is that in the amount and kind of education lies the main explanation of the achievement of an ethnic group. The policy implication is equally clear. If any ethnic group wishes to improve its total economic achievement it must provide its members with the amount and kind of education appropriate to the needs of a modern, progressing economy.





## Chapter II

1. André Raynauld, *Croissance et structure économiques de la province de Québec* (Quebec, 1961).
2. Suppose that in a manufacturing operation the capital to value-added ratio is 2 to 1, that equity represents one-quarter of the invested capital, and that labour accounts for 50 per cent of the value added. Under such circumstances a 10 per cent saving in the labour bill would add 10 percentage points to the rate of profit, which could well amount to a doubling of profits.
3. G. A. Auclair and W. H. Read, "A Cross-cultural Study of Industrial Leadership," a study prepared for the Royal Commission on Bilingualism and Biculturalism.
4. Since the Auclair-Read study is concerned only with managers and students, this statement is again an extrapolation of their findings.
5. A brief description of theories X and Y is given in the Auclair-Read study, Chapter V, "The Management of People."
6. "The Occupational Value of Education for Superior High School Graduates," *Journal of Higher Education*, XXVII (1956), 201-13, reported in S. E. Harris (ed.), *Higher Education in the United States* (Cambridge, 1960).
7. Gary S. Becker, *Human Capital, a Theoretical and Empirical Analysis, with Special Reference to Education* (New York, 1964).
8. R. Solow, "Technical Change and the Aggregate Production Function," *Review of Economic Studies*, XXIV (August, 1957), 312-20.

9. B. F. Massell, "Capital Formation and Technological Change in United States Manufacturing," *Review of Economic Studies*, XXVII (May, 1960), 182-8.
10. Evsey Domar, "On the Measurement of Technological Change," *Economic Journal*, LXXI (December, 1961), 709-29.
11. Theodore W. Schultz, "Capital Formation by Education," *Journal of Political Economy*, LXVIII (December, 1960), 571-83.
12. Becker, *Human Capital*
13. W. L. Hansen, "Total and Private Rates of Return to Investment in Schooling," *Journal of Political Economy*, LXXI (April, 1963), 128-40.
14. H. P. Miller, "Annual and Lifetime Income in relation to Education, 1939-1959," *American Economic Review*, L (December, 1960), 962-86.
15. Willson Woodside, *The University Question; Who Should Go? Who Should Pay?* (Toronto, 1958).
16. This creates an interesting problem in resource allocation: how does a society allocate scarce educational time and money between courses designed to promote economic well-being in the short run and non-economic well-being in the long run when, according to Keynes, "we are all dead"?

### Chapter III

1. Robert N. Morrison, *Corporate Adaptability to Bilingualism and Biculturalism*, Documents of the Royal Commission on Bilingualism and Biculturalism, no. 5 (Ottawa, 1970).
2. John Porter and P. C. Pineo, "French-English Differences in the Evaluation of Occupations, Industries, Ethnicities and Religions in the Montreal Metropolitan Area," a study prepared for the R.C.B.&B.
3. John Lindeman and Donald Armstrong, *Policies and Practices of United States Subsidiaries in Canada* (Montreal, 1961).
4. See Morrison, *Corporate Adaptability*.

## Chapter IV

1. C. S. Joslyn and F. W. Taussig, *American Business Leaders, a Study in Social Origins and Social Stratification* (New York, 1932).
2. Mabel Newcomer, *The Big Business Executive, the Factors that Made Him, 1900-1950* (New York, 1955).
3. Canada, Dominion Bureau of Statistics, *Annual Survey of Education in Canada* (Ottawa, 1929), 108.
4. Auclair and Read, "A Cross-cultural Study."
5. Morrison, *Corporate Adaptability*.

## Chapter V

1. Auclair and Read, "A Cross-cultural Study."
2. Morrison, *Corporate Adaptability*.









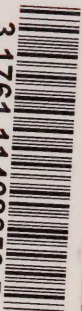




BINDING SECT

JUL 5 1971





3 1761 11468659 5